



DEPARTMENT OF NAVY TEST & EVALUATION

TOTAL TRAINING CATALOG

November 2012
Release 1.2



Department of Navy Test & Evaluation Total Training Catalog, Release 1.2

Executive Summary

The Department of the Navy (DON) Test and Evaluation (T&E) Total Training Catalog is meant to be a living document and quick reference guide for development and training of the DON T&E workforce. This training catalog serves as a compendium of available T&E-related training in DOD (e.g., Defense Acquisition University, Agencies), DON (e.g., System Commands, Operational Test Activities), Industry (e.g., professional associations) and Academia (e.g. universities). The DON T&E workforce should use this document as a ready resource to find required and elective training, development courses, and to enhance overall T&E knowledge, skills and abilities. This document provides information for those seeking Defense Acquisition Workforce Improvement Act (DAWIA) T&E Career Field Certification, those seeking enhanced knowledge and training for subject matter expertise areas, and those seeking Continuous Learning training needs. We hope that the Total Training Catalog serves as an essential tool in your career growth.

What's New in Release 1.2

The latest changes to the T&E DAWIA curriculum and educational standards that were effective 01 Oct 2012 have been incorporated. DON Director for Acquisition and Career Management (DACM) acquisition workforce goals for FY13 have also been included.

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Electronic Catalog:

DoN T&E Website for T&E policy, resources and workforce information is:
https://nserc.navy.mil/asnrda/don_te

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 SYS 101 Fundamentals of Systems Planning, Research, Development, and Engineering
 TST 102 Fundamentals of Systems Acquisition Management
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 CLE 025 Information Assurance (IA)
 CLE 035 DTEPI Introduction to Probability and Statistics

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 CLE 029 Testing in a Joint Environment
 CLE 301 Reliability and Maintainability
 IRM 101 Basic Information Systems Acquisition

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 SYS 202 Intermediate Systems Planning, Research, Development, and Engineering, Part I
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 CLE 029 Testing in a Joint Environment
 CLR 101 Introduction to the Joint Capabilities Integration & Development System
 CLE 301 Reliability and Maintainability
 CLE 003 Technical Reviews

CorePlus Development Guide Level 2

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 CVS-200 Introduction to Carrier Suitability Testing
 EOS-200 Introduction to Electro-Optic Systems
 GIT-210 Design of Experiments
 GIT-211 Multi-Sensor Data Fusion
 LEA-200 Lethality Analysis
 MTL-210 MATLAB Basics
 MTL-211 Advanced MATLAB
 MTL-212 Image Processing
 MTL-213 Signal Processing – Electronic Warfare
 MTL-214 Signal Processing for MATLAB
 MTL-215 Simulink-Aero/Controls
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 NCS-210 Link 16/JTIDS/MIDS Advanced (L16/F Level 4)
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 NTG-210 RFI and Jamming Issues for NAVAIR
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 TPS-210 Introduction to Aircraft and Systems Test & Evaluation
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 ITE-100 Indoctrination

FTB-100 Flight Test Basics
 TP-100 Test Planning
 TR-100 Test Reporting
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 LEA-200 Lethality Analysis
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 TPS-211 Introduction to UAS Flight Test
 TPS-212 Introduction to Airplane Flying Qualities Test & Evaluation
 TPS-213 Introduction to Rotary Wing Flying Qualities & Performance
 TR-200 Test Reporting for T&E Managers
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 MTL-215 Simulink-Aero/Controls
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 TAR-200 Target Capabilities
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 TP-200 Test Planning for T&E Managers
 TPS-210 Introduction to Aircraft and Systems Test & Evaluation
 TPS-211 Introduction to UAS Flight Test
 TPS-212 Introduction to Airplane Flying Qualities Test & Evaluation
 TR-200 Test Reporting for T&E Managers

TRV-200 Introduction to the Test Requirements Definition, Validation and Concurrency (TRDVC) Process
WBB-210 How Washington Works

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TP-100 Test Planning
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DAU-211 Logistics Test & Evaluation
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AWT-100 Airworthiness for Testers
GIT-210 Design of Experiments
MTL-210 MATLAB Basics
OTF-200 Operational Test Fundamentals
OTR-200 Certification of Readiness for Operational Test
WBB-210 How Washington Works

College of Operational T&E Program of Study

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ITE-100 Indoctrination
FTB-100 Flight Test Basics
TP-100 Test Planning
TR-100 Test Reporting
TP-200 Test Planning for T&E Managers
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A. Introduction

The Department of the Navy (DON) Test and Evaluation (T&E) Total Training Catalog is meant to be a living document and quick reference guide for development and training of the DON T&E workforce. This training catalog serves as a compendium of available T&E-related training in DOD (e.g., Defense Acquisition University, Agencies), DON (e.g., System Commands, Operational Test Activities), Industry (e.g., professional associations) and Academia (e.g. universities). The DON T&E workforce should use this document as a ready resource to find required and elective training, development courses, and to enhance overall T&E knowledge, skills and abilities. This document provides information for those seeking Defense Acquisition Workforce Improvement Act (DAWIA) T&E Career Field Certification and those seeking improvement of capabilities in subject matter expertise areas for Continuous Learning training needs. The overall purpose of this training catalog is summarized below.

Purpose of the DON T&E Total Training Catalog

- Enhance DON T&E Workforce with high quality, integrated training
- Leverage most effective T&E workforce training approaches across the DON T&E domain
- Promote career satisfaction, advancement and retention of T&E workforce

B. Background

Since 2009 there has been a concerted and very deliberate effort to revitalize and improve the Department of Navy (DON) Test and Evaluation (T&E) workforce as part of DoD Acquisition Reform efforts. Two important events occurred in 2009 that will impact DON T&E for many years to come. In early 2009, the Weapon System Acquisition Reform Act (WSARA) was passed by Congress and put U.S. Code Title 10 “teeth” into starting programs right. There are many improvement initiatives affecting the acquisition process, including a renewed focus on Developmental T&E (DT&E) execution by programs, and training and development of the DOD/Services T&E workforce as reflected by standup of Deputy Assistant Secretary of Defense, DT&E (DASD (DT&E)). The office was formed to provide oversight and advocate improvements in DT&E activities for acquisition programs, and to lead development and training of the DOD T&E Workforce.

The next big event in 2009 was the filling of the Deputy DON T&E Executive position in ASN(RDA) to provide executive-level leadership for DON T&E. This provided an improved interface and linkage to the other Service T&E Executives, Director Operational T&E (DOT&E) and DASD (DT&E) to address critical T&E issues. The Deputy DON T&E Executive is double-hatted as ASN (RD&A) T&E and N84 to bridge T&E support for Naval systems acquisition, T&E resource requirements and test strategy development. N84 is also a Resource Sponsor for the Major Range and Test Facility Base (MRTFB) and the associated Navy test ranges and labs, ensuring that advanced test capabilities are ready to support programs today and in the future.

The Deputy DON T&E Executive is also the Naval Acquisition Career Field Council (ACC) T&E National Lead and has the task to promote the health of the career field to ensure sustainability in the future. The DON T&E office also represents Navy and Marine Corps T&E developmental and training interests on the OSD T&E Functional

Integrated Process Team (FIPT) which is focused on improving policies and training curriculum for DOD DAWIA T&E coded personnel.

To improve T&E across the board, the Deputy DON T&E Executive has established the T&E Improvement Process (TEIP) with four major T&E thrust areas: Workforce, Infrastructure, Policy and Communications. The T&E Workforce Thrust is relevant and aligned with DACM and DON goals to revitalize the Acquisition Workforce. As far as DAWIA career field communities go, the DON T&E acquisition workforce is not a large group and is unique in that there are many other career fields (e.g., Program Management, Systems Engineering (SPRDE), and Information Technology) who execute T&E in acquisition programs.

In February 2010, the Deputy DON T&E Executive hosted a two day T&E Workforce Competency Offsite with SYSCOM and Operational Test Activity (OTA) T&E representatives to understand the “as is” state and develop “to be” goal and objectives for DON T&E. Three critical workforce improvement elements were identified:

1. Forecasting and Rightsizing
2. Hiring, Retention and Career Progression
3. Development (Training)

The DON T&E Workforce Competency (WC) IPT was established in 2010 and continues today to implement “to be” goals and objectives, and provide a quarterly forum and regular communication between SYSCOMs and DASN(RDT&E) T&E Office on workforce issues. The team supports the yearly DON DT&E Self Assessment Report, and provides field activity feed-back to DOD T&E Function IPT (FIPT) and DON Acquisition Career Field Council (ACC) initiatives.

In 2012, based on the increasing complexity of systems, as well as a need to develop more rigorous, scientific, and statistically based T&E design methodologies, the core certification standards for the T&E acquisition workforce were revised to advance the overall intellectual proficiency in T&E.

- Old Certification Standard
 - Baccalaureate Degree or higher (any field of study)
 - 24 semester hours or equivalent in technical or scientific courses such as mathematics (e.g. calculus, probability, statistics), physical sciences (e.g. chemistry, biology, physics), psychology, operations research/systems analysis, engineering, computer science, and information technology
- New Certification Standard (effective 1 October 2012)
 - Baccalaureate Degree or graduate degree in a technical or scientific field such as engineering, physics, chemistry, biology, mathematics, operations research, engineering management, or computer science

A goal for the Development (Training) element was to develop the DON T&E Total Training Catalog reflecting T&E training available in DOD, DON and outside sources. See Figure 1 which provides an overview of training resources available to our T&E workforce. The T&E community continues to evolve across the acquisition and non-acquisition workforce and grow to meet program needs. We all have the common goal of ensuring that the systems we develop, deliver and deploy do what they should for our warfighters. It’s an exciting area to work in and our workforce is valued and appreciated for the contributions they provide.

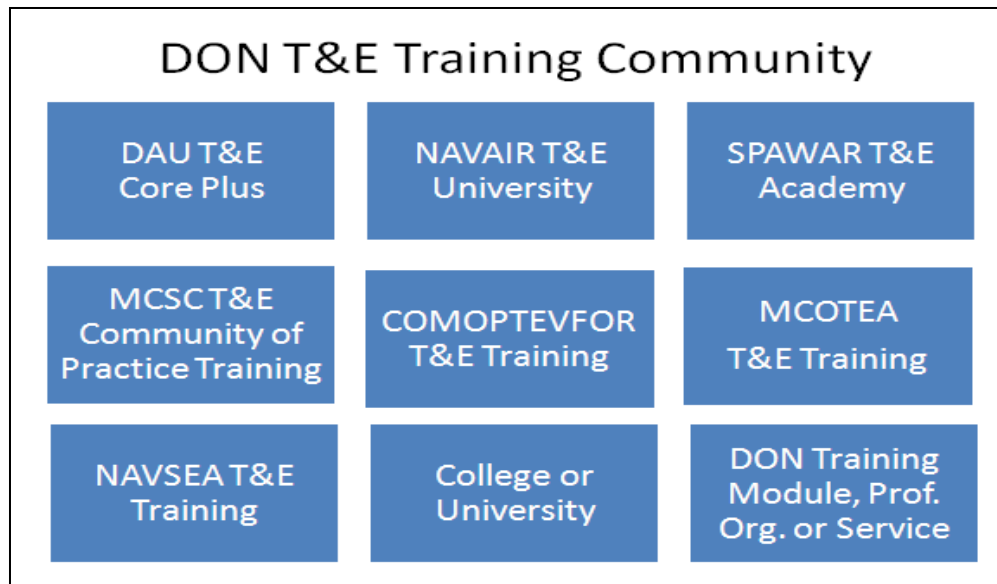


Figure 1. DON T&E Training Resource Summary.

C. Certification and Training Roadmap

DOD and DON have significant efforts underway to improve the training and development of its Acquisition Workforce. These efforts are targeted to deliver a forward thinking Acquisition Workforce that is well-managed, highly trained and fully qualified to fill Critical and Key Leadership Positions. The DOD Acquisition, Technology & Logistics (AT&L) career field “Certification & Core Plus Development Guide” for each DAWIA career field (to include T&E) can be found at:

<http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx#>

The Navy Director Acquisition Career Management (DACM) has goals to rebuild, reinforce, and professionalize the DON acquisition community. The DON DAWIA Operating Guide is the framework for achieving these goals. It touches every member of the workforce throughout all professional career stages to include T&E. Find the DON DAWIA Operation Guide, dated December 21, 2011 at:

https://acquisition.navy.mil/rda/home/acquisition_workforce/strategy_policy/dawia_op_guide

The DON DACM has set the following Fiscal Year 2013 DAWIA Goals to emphasize improving performance toward achieving DAWIA requirements. A new goal has been added, increasing emphasis on the visibility of Program Key Leadership Positions (KLPs), one of which is the Program T&E Lead. The Fiscal Year 2013 DON DACM goals, and in turn the FY13 DON T&E Acquisition Workforce Goals are:

- Goal 1 – Certification Levels: 95% of AWF members be certified to the level required by their position within allowable timeframes.
- Goal 2 – Continuous Learning: 85% of AWF members have current CL certificates.
- Goal 3 – Acquisition Corps Membership for CAPs: 95% of CAPs be filled by Acquisition Corps members at the time of assignment to the CAP.

- Goal 4 – PMT 401/402 Compliance: 100% of ACAT I and II PMs and DPMs complete PMT 401 and PMT 402 within six months of their PM/DPM assignment.
- Goal 5 – Key Leadership Positions: 100% of individuals assigned to KLPs are fully qualified

Figure 2 below provides an overview of DON DAWIA T&E Career Field Certification and other T&E training aspects that should be pursued by all DON T&E Acquisition Workforce members. T&E non-acquisition workforce members can also take DAWIA or other T&E-related courses to enhance their knowledge, abilities and skills.

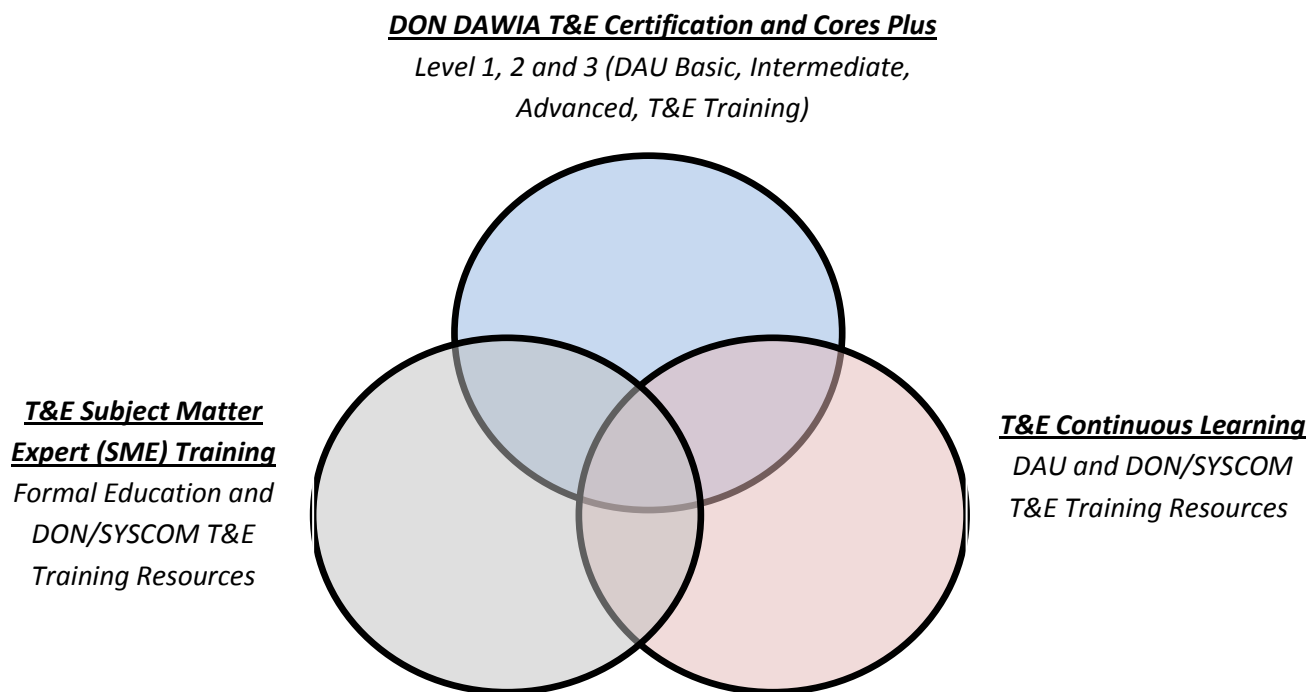
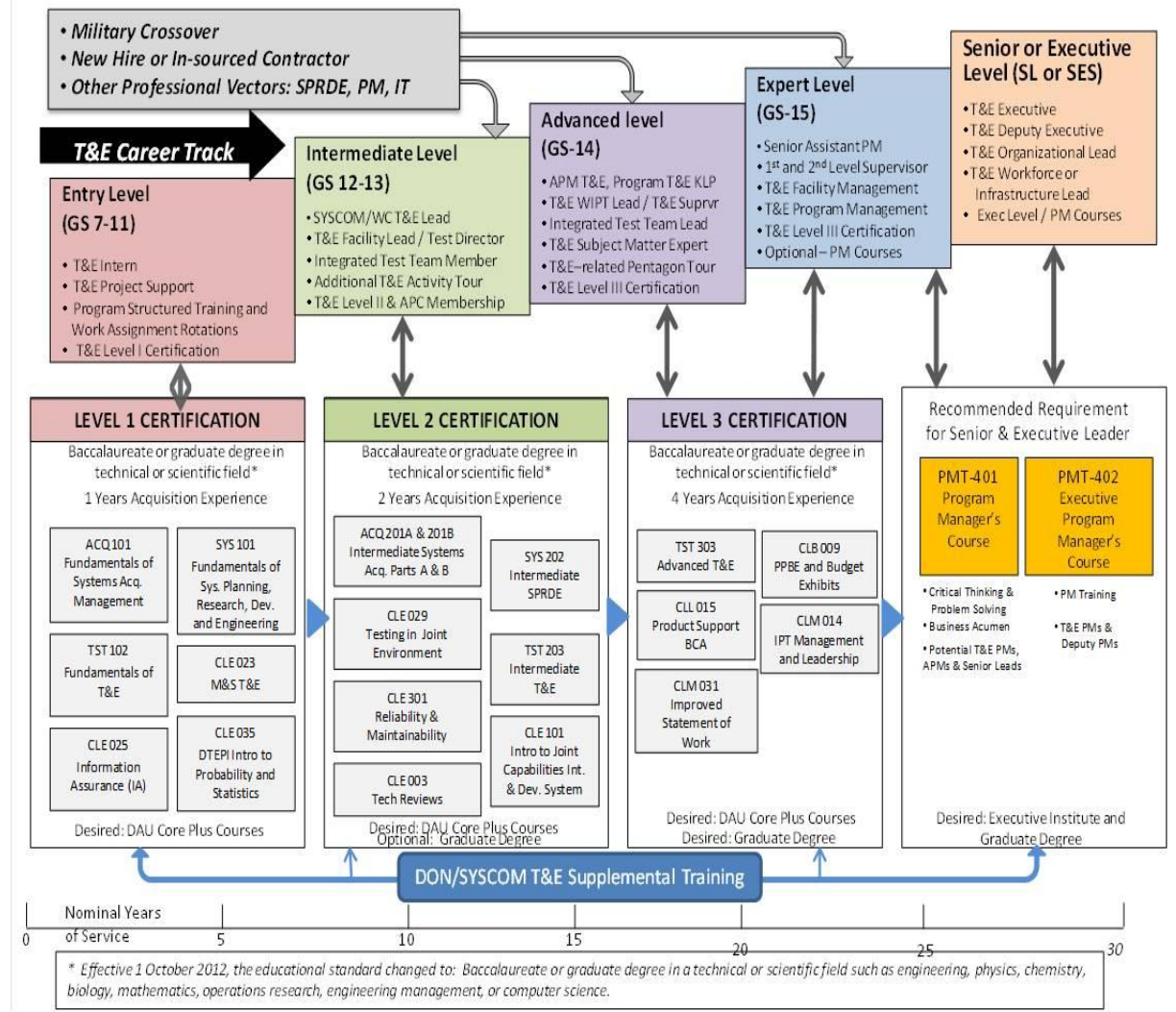


Figure 2. Summary of Certification and Training Areas.

Figure 3 below provides a notional DON T&E Career Path Developmental Model with summary of education and training resources, as well as, certification requirements for the T&E acquisition workforce

Figure 3. DON T&E Career Path Development Model



D. Course Descriptions



Defense Acquisition University (DAU)

DAU provides a full range of basic, intermediate, and advanced certification training, assignment-specific training, applied research, and continuous learning opportunities. The university also fosters professional development through mission assistance, rapid-deployment training on emerging acquisition initiatives, online knowledge-sharing tools, and continuous learning modules. All T&E career field personnel need to complete DAU courses in accordance with the level assigned to their position. Figure 3 may be used as a guide to identify the DAU Core Plus courses needed to complete Levels 1, 2 and 3 career field certification.

The courses for this section have been grouped together by Core Certification Standards and the CorePlus Development Guide. CorePlus Development and Training courses are to be tailored to your type of working assignment (i.e., Headquarters and Staff, Program Management/Matrix Support or Range/Lab/Field Support Activity).

Go to the following link: <http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx?lvl=1&cflid=13> for more details on T&E Certification Standards and the Core Plus Development Guide.

For registration and availability of T&E-related courses listed below, unless specified otherwise, please visit <http://icatalog.dau.mil>.

Test & Evaluation Core Certification Standards Level 1

ACQ 101 Fundamentals of Systems Acquisition Management

Description: This course provides a broad overview of the DoD systems acquisition process, covering all phases of acquisition. It introduces the Joint Capabilities Integration and Development System; the planning, programming, budgeting, and execution process; DoD 5000-series policy documents; and current issues in systems acquisition management. Designed for individuals who have little or no experience in DoD acquisition management, this course has proven very useful to personnel in headquarters, program management, and functional or support offices.

Who Should Take This Training: This course is designed for military officers, O-1 through O-3, and DoD civilians, GS-5 through GS-9. However, this course is open to all ranks and grades.

Additional Course Information: This course is offered online throughout the year. Students will have 60 days to complete the course. 2.5 Continuous Education Units, 25 Continuous Learning Points, and 6 Reservist Retirement Points.

SYS 101 Fundamentals of Systems Planning, Research, Development, and Engineering

Description: This course is a technically rigorous, comprehensive introduction to systems engineering and the various technical management and technical management processes involved

in its application. Based on the systems engineering processes outlined in the Defense Acquisition Guidebook, SYS 101 provides the essential foundations needed for systems planning, research, development, and engineering careerists and others—such as program management personnel and life cycle support managers—to effectively participate in the application and the management of DoD systems engineering processes and their related activities.

Who Should Take This Training: This course is designed for military officers, O-1 through O-3, and DoD civilians, GS-5 through GS-9. However, this course is open to all ranks and grades.

Additional Course Information: This course is offered online throughout the year. Students will have 60 days to complete the course. 2.5 Continuous Education Units, 25 Continuous Learning Points, and 6 Reservist Retirement Points.

TST 102 Fundamentals of Systems Acquisition Management

Description: The Fundamentals of Test and Evaluation course emphasizes basic DoD test and evaluation (T&E) principles, policies, processes, and practices. TST 102 covers the integrated T&E processes outlined in the Defense Acquisition Guidebook and provides the essential foundation knowledge needed by T&E professionals and others to more effectively participate in DoD T&E activities.

Who Should Take This Training: This course is part of the Level I certification training requirement for the Test & Evaluation career field. Additionally, as a basic introduction to T&E, it is suitable for personnel in other technical acquisition management and program management positions who want to understand more about T&E and the critical role it plays in system acquisition.

Additional Course Information: This course is offered online throughout the year. Students will have 60 days to complete the course. 1.8 Continuous Education Units, 18 Continuous Learning Points, and 5 Reservist Retirement Points.

Pre-requisites: ACQ 101, Fundamentals of Systems Acquisition Management, SYS 101, Fundamentals of Systems Planning, Research, Development, and Engineering

Equivalents: TST 101 Introduction to Acquisition Workforce Test and Evaluation.

CLE 023 Modeling and Simulation for Test and Evaluation

Description: This module discusses Information Assurance (IA) within defense acquisition programs. Students will gain an appreciation for its key attributes; the Global Information Grid (GIG) and Network-Centric Warfare; the DoD regulatory requirements for implementing IA in DoD acquisitions; how to determine IA compliance requirements; and how to successfully integrate Information Assurance (IA) into an acquisition program.

Who Should Take This Training: T&E, SPRDE and PM career fields.

Additional Course Information: Approximately 3 hours. 0 Continuous Education Units, 3 Continuous Learning Points, and 1 Reservist Retirement Points.

CLE 025 Information Assurance (IA)

Description: Information Assurance (IA) for Acquisition Professionals is a critical component of operational readiness. The Information Assurance for Acquisition Professionals module discusses the incorporation of IA into defense acquisition programs. This module will identify key IA attributes, statutory and regulatory requirements for IA, IA strategies for acquisition programs, steps for successfully implementing IA and an explanation of the IA certification and accreditation process. This module enables Program Managers and other acquisition professionals to integrate IA into acquisition programs.

Who Should Take This Training: Acquisition workforce members in the PM, PQM, SPRDE - S&TM career fields and support contractors.

Additional Course Information: Approximately 4 hours. 0 Continuous Education Units, 4 Continuous Learning Points, and 0 Reservist Retirement Points.

CLE 035 DTEPI Introduction to Probability and Statistics

Description: The goal of the Introduction to Probability and Statistics Continuous Learning Module is to provide participants with a basic introduction and understanding of the analysis and evaluation tools in the Test and Evaluation (T&E) career field. The DTEPI Introduction to Probability and Statistics module will cover the basics of probability and statistics for Test and Evaluation.

Who Should Take This Training: T&E Career Field.

Additional Course Information: Approximately 2 hours. 0 Continuous Education Units, 2 Continuous Learning Points, and 1 Reservist Retirement Points.

CorePlus Development Guide Level 1

CLE 004 Introduction to Lean Enterprise Concepts

Description: This module focuses on the lean concepts most applicable to manufacturing and the management of industrial facilities. It addresses the five fundamental Lean principles; Lean value streams; Lean metrics; identifying manufacturing and information waste within an enterprise; and techniques for implementing Lean beyond the factory floor to include value stream analysis and mapping.

Who Should Take This Training: All acquisition professionals, but especially those in the PQM career field, as well as members of the defense industry.

Additional Course Information: Approximately 1 hours. 0 Continuous Education Units, 1 Continuous Learning Points, and 1 Reservist Retirement Points.

Pre-Requisites: Recommended undergraduate degree or equivalent career experience.

CLE 015 Continuous Process Improvement Familiarization

Description: This module familiarizes students with the various Continuous Process Improvement (CPI) methodologies such as Six Sigma, Lean and the Theory of Constraints, which can be employed to improve overall organizational performance. Roles and responsibilities are addressed as well as effective deployment strategies.

Who Should Take This Training: All military and civilian Department of Defense personnel and contractors supporting DoD activities.

Additional Course Information: Approximately 1.5 hours. 0 Continuous Education Units, 1.5 Continuous Learning Points, and 1 Reservist Retirement Points.

Pre-Requisites: Recommended undergraduate degree or equivalent career experience.

CLE 029 Testing in a Joint Environment

Description: This module will familiarize DoD Test and Evaluation personnel and other acquisition professionals with the basic principles and practices related to testing in a joint environment.

Who Should Take This Training: Members of the T&E and PM DAWIA career field and any other personnel interested in learning about of Testing in a Joint Environment.

Additional Course Information: Approximately 4 hours. 0 Continuous Education Units, 4 Continuous Learning Points, and 0 Reservist Retirement Points.

CLE 301 Reliability and Maintainability

Description: The Reliability and Maintainability of military systems are integral elements of mission success and major determinants of the total ownership cost. An important objective of defense acquisition programs is to ensure that weapons systems achieve their user-defined Reliability, Availability, and Maintainability (RAM) performance requirements. This module defines Reliability, Availability, and Maintainability (RAM); explores the significant influence of Reliability and Maintainability on systems; and provides practical techniques that may be applied in an acquisition program to achieve the desired levels of Reliability and Maintainability. After taking this course participants will be able to define Reliability, Availability, and Maintainability (RAM) and its effect on system performance; define common R&M Measures; distinguish between predicting R&M vs. engineering it; understand RAM mathematical foundations; outline strategies for achieving R&M.

Who Should Take This Training: T&E, LCL, SPRDE, IT & PM career fields.

Additional Course Information: Approximately 4 hours. 0 Continuous Education Units, 4 Continuous Learning Points, and 2 Reservist Retirement Points.

IRM 101 Basic Information Systems Acquisition

Description: Within the framework of a program office IPT, this course covers introductory-level concepts in DoD information systems and software acquisition management. Key areas covered include DoD regulatory and technical frameworks, common software risks, software and system architectures, lifecycle reviews and software development and integration processes. Software standards, information assurance, software and system measures, testing, contracting issues,

software quality, and the role of process maturity, as well as best practices for the management of software-intensive systems are also introduced.

Who Should Take This Training: This course is designed for acquisition workforce members who are members or prospective members of the Information Technology career field.

Additional Course Information: Approximately 4 hours. 0 Continuous Education Units, 4 Continuous Learning Points, and 2 Reservist Retirement Points.

Pre-Requisites: ACQ 101, Fundamentals of Systems Acquisition Management, 1 year of acquisition experience.

Test & Evaluation Core Certification Standards Level 2

ACQ 201A Intermediate Systems Acquisition, Part A

Description: Intermediate Systems Acquisition, Part A, uses computer-based training to prepare mid-level acquisition professionals to work in integrated product teams by providing an overview of systems acquisition principles and processes. Both ACQ 201A and ACQ 201B are required for DAWIA certification.

Who Should Take This Training: ACQ 201A is for military officers, O-3 and above; civilians, GS-9 and above; and industry counterparts who are Level I certified in acquisition (or have met the industry equivalent). Professionals should have 2 to 4 years of acquisition or functionally related experience.

Additional Course Information: This course is offered online throughout the year. Students will have 60 days to complete the course. 2.5 Continuous Education Units, 25 Continuous Learning Points, and 6 Reservist Retirement Points.

Pre-requisites: ACQ 101, Fundamentals of Systems Acquisition Management.

Equivalents: ACQ 201, Intermediate Systems Acquisition.

ACQ 201B Intermediate Systems Acquisition, Part B

Description: Intermediate Systems Acquisition, Part B, prepares mid-level acquisition professionals to work effectively in integrated product teams by understanding systems acquisition principles and processes. Both ACQ 201A and ACQ 201B are required for DAWIA certification.

Who Should Take This Training: ACQ 201B is for military officers, O-3 and above; civilians, GS-9 and above; and industry counterparts who are Level I certified in acquisition (or have met the industry equivalent). Professionals should have 2 to 4 years of acquisition or functionally related experience.

Additional Course Information: This classroom course is offered throughout the year. The course takes 4.5 days to complete. 3.4 Continuous Education Units, 34 Continuous Learning Points, and 0 Reservist Retirement Points.

Pre-requisites: ACQ 201A, Intermediate Systems Acquisition, Part A.

Equivalents: ACQ 201, Intermediate Systems Acquisition.

SYS 202 Intermediate Systems Planning, Research, Development, and Engineering, Part I

Description: This distance-learning course provides an understanding of how the DoD's systems engineering technical and technical management processes can be applied to a notional system within the context of the acquisition lifecycle. Course content includes the scope and role of systems engineering and its major technical inputs and outputs, timing of technical baselines, the role of technical reviews, important design considerations and other related areas throughout a systems' life.

Who Should Take This Training: This course is part of the Level II certification training requirement for the Systems Planning, Research, Development, and Engineering—Systems Engineering (SPRDE-SE) career field. Additionally, members of other career fields who require an understanding of how systems engineering is applied to systems acquisition and sustainment will benefit from this course.

Additional Course Information: This classroom course is offered throughout the year. The course takes 4.5 days to complete. 0.9 Continuous Education Units, 9 Continuous Learning Points, and 2 Reservist Retirement Points.

Pre-requisites: ACQ 201B, Intermediate Systems Acquisition, Part B, SYS 101, Fundamentals of Systems Planning, Research, Development, and Engineering. Recommended: At least 2 years of technical experience in an acquisition position to include industry or government equivalent from among the following career fields/paths: SPRDE—SE; SPRDE—S&TM; IT; T&E; PQM; PM; or LCL.

Equivalents: SYS 201A, Intermediate Systems Planning, Research, Development and Engineering, Part A.

TST 203 Intermediate Test and Evaluation

Description: This course builds upon professionals' knowledge, skills, and on-the-job experience relating to DoD test and evaluation (T&E) policies, processes, and practices. A number of problem-solving situations engage participants in the application of T&E concepts and principles. Course topics include the role of T&E in systems acquisition; T&E planning and the test and evaluation strategy; test and evaluation master plan development; managing a T&E program; and planning, conducting, and processing the results of T&E events.

Who Should Take This Training: This course is part of the Level II certification training requirement for the Test and Evaluation career field. Additionally, members of other acquisition career fields, including defense industry personnel who require an understanding of how T&E is applied to systems acquisition will benefit from this course.

Additional Course Information: This classroom course is offered throughout the year. The course takes 4.5 days to complete. 3.7 Continuous Education Units, 37 Continuous Learning Points, and 0 Reservist Retirement Points.

Pre-requisites: ACQ 201A, Intermediate Systems Acquisition, Part A, ACQ 201B, Intermediate Systems Acquisition, Part B, TST 102, Fundamentals of Test and Evaluation, CLE 035, DTEPI

Introduction to Probability and Statistics, CLR 101, Introduction to the Joint Capabilities Integration & Development System, CLE 301, CLE 301 Reliability and Maintainability

Equivalents: TST 202, Intermediate Test and Evaluation.

CLE 029 Testing in a Joint Environment – See previous description.

CLR 101 Introduction to the Joint Capabilities Integration & Development System

Description: This module provides an overview of the Joint Capabilities Integration & Development System (JCIDS). The five lessons focus on terms, definitions, basic concepts, processes, and roles and responsibilities involved within JCIDS as well as JCIDS' interaction with both the Defense Acquisition System (DAS) and Planning Programming Budgeting and Execution (PPBE).

Who Should Take This Training: This module is designed for DoD professionals who contribute to Requirements generation and capability development process to include JCIDS analysis, subject matter or domain expertise, document staffing and coordination and/or administrative support.

Additional Course Information: Approximately 3.5 hours. 0 Continuous Education Units, 4 Continuous Learning Points, and 1 Reservist Retirement Points.

CLE 301 Reliability and Maintainability – See previous description.

CLE 003 Technical Reviews

Description: Technical Reviews form the backbone of a robust Technical Assessment Process and are one of the foundation elements of an effective Systems Engineering Plan. This module provides a systematic process for employing Technical Reviews to assess design maturity, technical risk, development status and programmatic risk for acquisition programs. The module also presents essential, practical guidelines on the effective use of Technical Reviews as part of the DoD acquisition life cycle and also provides access to detailed, tailorable checklists for individual Technical Reviews that can be used to support their conduct. These Technical Review guidelines are based on best engineering practices as well as the Defense Acquisition Guidebook, Chapter 4.

Who Should Take This Training: Members of the acquisition workforce who are interested in understanding how to effectively apply Technical Reviews.

Additional Course Information: Approximately 3 hours. 0 Continuous Education Units, 3 Continuous Learning Points, and 1 Reservist Retirement Points.

CorePlus Development Guide Level 2

CLB 007 Cost Analysis

Description: Cost Analysis (excerpted from BCF-103) focuses on the basic cost analysis process. Cost estimates are one of the fundamental building blocks of any acquisition program. At the end of this module, you should be able to define various financial management terms as they relate to the

defense acquisition process, determine when various cost estimates are required to be prepared, determine what estimating methodology is most appropriate, and determine what cost data is of interest to various program stakeholders.

Additional Course Information: Approximately 4 hours. 0 Continuous Education Units, 4 Continuous Learning Points, and 1 Reservist Retirement Points.

CLB 016 Introduction to Earned Value Management

Description: The Introduction to Earned Value Management module introduces the basics of earned value management (EVM) as it relates to acquisition program management. You will learn the five independent earned value variables and the three most common EVM metrics. At the conclusion of this module, you should be familiar with EVM-related laws passed by Congress, the Office of Management and Budget's implementation of these laws, and current Department of Defense policy guidance regarding EVM requirements. Additionally, you should recognize how work scope, schedule, and resources are combined to establish the EVM performance measurement baseline.

Additional Course Information: Approximately 1 hour. 0 Continuous Education Units, 1 Continuous Learning Points, and 1 Reservist Retirement Points.

CLE 003 Technical Reviews – See previous description.

CLE 015 Continuous Process Improvement Familiarization – See previous description.

CLE 017 Technical Planning

Description: Technical Planning is one of the key Systems Engineering Technical Management Processes. This module presents essential and practical technical planning guidance to assist students in formulating a sound technical planning approach and how it should be integrated into the overall program planning process. Described and illustrated in this module is the integration of tools like Earned Value Management and Risk Management with systems engineering processes and tools like Requirements Management, Technical Baseline Management, and Technical Reviews into a comprehensive approach for the overall technical planning processes of a program.

Who Should Take This Training: SPRDE, PM, and T&E career fields.

Additional Course Information: Approximately 3 hours. 0 Continuous Education Units, 3 Continuous Learning Points, and 1 Reservist Retirement Points.

CLE 021 Technology Readiness Assessments

Description: This module covers Technology Readiness Assessments (TRAs), Critical Technology Elements (CTEs), and Technology Readiness Levels (TRLs). Students will learn to recognize technology and management factors used in the CTE identification process; the basic maturity characteristics associated with various levels of technology maturity; the requirements for preparing and reviewing a TRA; and to recognize technology maturation considerations. The module will assist students in participating for a TRA and determine how to use the assessment process to enhance program success. The module also provides TRA best practices for both software and hardware systems.

Who Should Take This Training: SPRDE-STM career field, PMs and other program and Science and Technology (S&T) staff.

Additional Course Information: Approximately 3 hours. 0 Continuous Education Units, 3 Continuous Learning Points, and 1 Reservist Retirement Points.

CLE 025 Information Assurance (IA) – See previous description.

CLE 037 Telemetry

Description: This module will provide an overview of telemetry, including the components of telemetry systems and applications. Our coverage of the material begins with telemetry nomenclature, outlines a brief history of the field of telemetry, moves to the subsystems of a telemetry system, discusses the personnel who work with telemetry data, and touches upon range applications, testing, recording, display and analysis of telemetry data. The module concludes by discussing some related concepts, such as data processing systems.

Who Should Take This Training: T&E Career Field.

Objectives: Be able to describe a telemetry system and its associated subsystems; outline transmission, reception, recording and display details; summarize link analysis; describe testing of telemetry systems and range applications.

Additional Course Information: Approximately 6 hours. 0 Continuous Education Units, 6 Continuous Learning Points, and 2 Reservist Retirement Points.

CLE 038 Time Space-Position Information

Description: This Defense Test and Evaluation Profession Institute (DTEPI) learning module provides a general overview of Time Space-Position Information (TSPI) to include the importance of the error volume concept associated with each of the methods to be discussed. This is followed by detailed sections on radars, the Global Positioning System, optical systems, other TSPI systems, and a discussion of various scoring or miss-distance measurement systems.

Who Should Take This Training: T&E Career Field.

Objectives: Be able to define Space-Position Information (TSPI) and how it is used; distinguish among metric tracking, phased array and surveillance radars; describe the role of the Global Positioning System with respect to Time Space-Position Information (TSPI); describe Optical Tracking Systems.

Additional Course Information: Approximately 6 hours. 0 Continuous Education Units, 6 Continuous Learning Points, and 2 Reservist Retirement Points.

CLE 039 Environmental Issues in Testing and Evaluation

Description: This Defense Test and Evaluation Profession Institute (DTEPI) learning module focuses on the broad environmental issues and related procedures affecting the Department of Defense (DoD) mission related to Testing and Evaluation. After taking this course, participants should be able to list the goals of the National Environmental Policy Act (NEPA); identify the federal environmental laws that impact the DoD as they relate to Testing and Evaluation; identify the types of

environmental issues that affect Test and Evaluation; identify the emerging environmental issues for Military Munitions Rule, DoD Range Rules, etc.; and describe the Universal Documentation System (UDS).

Who Should Take This Training: T&E Career Field.

Additional Course Information: Approximately 5 hours. 0 Continuous Education Units, 5 Continuous Learning Points, and 1 Reservist Retirement Points.

CLE 060 Practical Software and Systems Measurement

Description: This Continuous Learning (CL) module provides an approach for and develops skills in obtaining and analyzing measurement data and in developing and assessing a measurement process. The module is intended for acquisition professions, suppliers, managers, technical leads, and measurement analysts.

Who Should Take This Training: T&E Career Field.

Additional Course Information: Approximately 5 hours. 0 Continuous Education Units, 5 Continuous Learning Points, and 2 Reservist Retirement Points.

CLM 013 Work-Breakdown Structure

Description: This module addresses two fundamental and interrelated types of work-breakdown structures: the program work-breakdown structure that is developed by a program management office and the contract work-breakdown structure that is developed by a contractor. The work-breakdown structure summarizes data for successive levels of management and provides information on the projected, actual, and current status of the program. The work-breakdown structure keeps the program's status constantly visible so that the program manager, in cooperation with the contractor, can identify and implement changes necessary to assure desired performance, schedule, and cost.

Who Should Take This Training: T&E Career Field.

Additional Course Information: Approximately 6 hours. 0 Continuous Education Units, 6 Continuous Learning Points, and 2 Reservist Retirement Points.

CLM 016 Cost Estimating

Description: This module focuses on basic cost-estimating tools and techniques. Cost estimates are one of the fundamental building blocks of the acquisition process. The cost estimate and its supporting budget are a part of the baseline against which a program's progress and success are measured.

Who Should Take This Training: T&E Career Field.

Additional Course Information: Approximately 8 hours. 0 Continuous Education Units, 8 Continuous Learning Points, and 2 Reservist Retirement Points.

CLM 017 Risk Management

Description: Risk is always a concern in the DoD systems acquisition process. The acquisition process itself is designed, to a large degree, to allow risk to be managed from conception to delivery of the system. Although risk is inherent in any program, risk management ensures managers take measures to assess and handle risks. This module focuses on tools and processes that can be used to manage risk on a defense system acquisition project.

Who Should Take This Training: T&E career field.

Additional Course Information: Approximately 8 hours. 0 Continuous Education Units, 8 Continuous Learning Points, and 2 Reservist Retirement Points.

CLM 035 Environmental Safety and Occupational Health

Description: This module, excerpted from PMT 352A, focuses on the increased emphasis and importance of environmental safety and occupational health as it relates to acquisition management. Program managers must ensure their programs, regardless of acquisition category, comply with environmental safety and occupational health statutory and regulatory requirements.

Additional Course Information: Approximately 4 hours. 0 Continuous Education Units, 4 Continuous Learning Points, and 1 Reservist Retirement Points.

IRM 202 Intermediate Information Systems Acquisition

Description: The Intermediate Information Systems Acquisition course focuses on the application of DoD policies, concepts, and best practices for the management and acquisition of software-intensive and Information Technology systems. Exercises, lectures, group discussion, and a comprehensive student-led practicum are used in IRM 202 to cover topics ranging from strategic planning, information assurance, architectures, system engineering, requirements management, software design and development, risk management, contracting, cost estimation, metrics, process maturity, quality, and testing, among other areas.

Who Should Take This Training: Individuals seeking Level II IT career field certification as well as for acquisition workforce personnel and industry equivalents that require an understanding of the management and acquisition of information systems within DoD

Additional Course Information: Approximately 9.5 class days. 7.9 Continuous Education Units, 79 Continuous Learning Points, and 0 Reservist Retirement Points.

Pre-Requisites: ACQ 201B, Intermediate Systems Acquisition, Part B, CLE 003, Technical Reviews, CLE 060, Practical Software and Systems Measurement, IRM 101, Basic Information Systems Acquisition or SAM 101 if SAM 101 was completed after 15 Nov 2005.

LOG 101 Acquisition Logistics Fundamentals

Description: Acquisition Logistics Fundamentals provides a broad overview of the role of acquisition logistics in the systems acquisition life cycle and systems engineering processes. Modules cover the logistics-relevant aspects of requirements identification, life-cycle costing, integrated product and process development, sustainment logistics, supportability analysis, product support, contracting, and contractor support.

Who Should Take This Training: Professionals responsible for planning, establishing, and maintaining the logistics-support infrastructure for DoD systems and equipment in each phase of the acquisition life cycle.

Additional Course Information: Approximately 60 calendar days. 2.7 Continuous Education Units, 27 Continuous Learning Points, and 7 Reservist Retirement Points.

Pre-Requisites: ACQ 101, Fundamentals of Systems Acquisition Management. Recommend at least 6 to 12 months of experience in an acquisition organization.

LOG 103 Reliability, Availability, and Maintainability (RAM)

Description: Professionals who take this course will be able to understand the relationship between reliability, availability and maintainability (RAM) as a critical factor in design, performance, cost, and sustainment. The course addresses the cross-disciplinary actions of Program Management, Systems Engineering, Test & Evaluation and both acquisition logistics and sustainment to evaluate the impact of reliability and maintainability decisions. Stressing a conceptual approach, the course presents basic reliability, availability and maintainability terminology and engineering practices. It discusses current legislative and DoD policy that have invigorated systems engineering and logistics engineering processes to improve the requirements process, minimize risk through reliability growth programs and ensure effectiveness and suitability through developmental and operational test and evaluation.

Who Should Take This Training: Life Cycle Logisticians and Program Managers. Encouraged for those in T&E, SPRDE-SE, and SPRDE-PSE.

Additional Course Information: Approximately 60 calendar days. 2 Continuous Education Units, 20 Continuous Learning Points, and 5 Reservist Retirement Points.

Pre-Requisites: ACQ 101, Fundamentals of Systems Acquisition Management.

PQM 101 Production, Quality, and Manufacturing Fundamentals

Description: Production, Quality and Manufacturing Fundamentals (PQM 101) is an entry level course that emphasizes basic production, manufacturing and quality assurance principles, policies, processes and practices used in DoD. The course exposes participants to manufacturing and quality scheduling, and control techniques, as well as production surveillance activities. Course content includes Production and Quality Assurance methods and procedures; Pre-Award and Post Award Fundamentals and tools; Contract Administration functions; Risk Management; Environmental, Health and Safety (ESH) Statutes and Responsibilities and Analytical Tools for continuous improvement.

Who Should Take This Training: This course is for industrial specialists, industrial engineers, quality assurance specialists, production officers, production specialists, contract administrators, and other acquisition personnel involved with or having duties in the areas of production, quality, or manufacturing. PQM 101 is part of the Level I certification training requirement for the Production, Quality, and Manufacturing career field.

Additional Course Information: Approximately 60 calendar days. 1.3 Continuous Education Units, 13 Continuous Learning Points, and 3 Reservist Retirement Points.

Pre-Requisites: ACQ 101, Fundamentals of Systems Acquisition Management. At least 1 year of acquisition experience and CLC 024, Basic Math Tutorial, are also recommended.

SPS 106 Database Maintenance

Description: This Continuous Learning Module is a conversion of the existing instructor-led training currently offered by the JPMO. The purpose of this conversion to web-based training (WBT) is to provide a viable option for procurement professionals who cannot fit the classroom training into their busy schedules.

Who Should Take This Training: T&E Career Field.

Additional Course Information: Approximately 4 hours. 0 Continuous Education Units, 4 Continuous Learning Points, and 1 Reservist Retirement Points.

Pre-Requisites: ACQ 101, Fundamentals of Systems Acquisition Management. At least 1 year of acquisition experience and CLC 024, Basic Math Tutorial, are also recommended.

Test & Evaluation Core Certification Standards Level 3

TST 303 Advanced Test and Evaluation

Description: Designed for senior DoD acquisition personnel, the Advanced Test and Evaluation (T&E) course is focused around leadership and management issues in a T&E environment. TST 303 involves facilitated discussion of current DoD policies, strategies, processes, and practices as they are applied and used for the planning and management of test and evaluation (T&E) for DoD systems. This course covers a variety of knowledge-building and interactive problem-solving skills using case studies developed around lessons learned from actual system acquisitions. Class discussion and study group efforts culminate in participant presentations based around case analysis and solution analysis. Knowledge and skills developed in this course will facilitate successful professional participation as a T&E member in integrated planning and development activities for major programs.

Who Should Take This Training: Required for Level III certification in the T&E career field. Typical attendees include T&E leads for programs and Service/agency/facility T&E managers and engineers. Other senior technical and management personnel, including defense industry personnel, who plan, perform, and manage T&E tasks in support of acquisition will also benefit from the course.

Additional Course Information: This classroom course is offered throughout the year. The course takes 4.5 days to complete. 3.2 Continuous Education Units, 32 Continuous Learning Points, and 0 Reservist Retirement Points.

Pre-requisites: ACQ 201B, Intermediate Systems Acquisition, Part B, TST 203, Intermediate Test and Evaluation, CLB 009, Planning, Programming, Budgeting, and Execution and Budget Exhibits, CLM 014, IPT Management and Leadership

Equivalents: TST 301 Advanced Test and Evaluation, TST 302 Advanced Test and Evaluation.

CLB 009 Planning, Programming, Budgeting, and Execution and Budget Exhibits

Description: PPBE and Budget Exhibits focuses on explaining the Planning, Programming, Budgeting and Execution (PPBE) process, including the relationship of each phase to the systems acquisition process. At the end of this module, you should be able to recall the primary purpose of each of the phases of PPBE, identify the inter-relationship between PPBE and the Defense Acquisition system, and identify the purpose content and dimensions of the Future Years Defense Program (FYDP).

Additional Course Information: Approximately 3 hours. 0 Continuous Education Units, 5 Continuous Learning Points, and 1 Reservist Retirement Points.

CLL 015 Product Support Business Case Analysis (BCA)

Description: This module provides an overview of DoD's policy, guidance, and application of Product Support BCA. The primary focus of the module is the structure, format, process, and methodology of Product Support BCA. In addition, the module addresses the application of Product Support BCA in the DoD context, which is currently oriented toward the use of Product Support BCA to support best value selection of weapon system program product support strategies using performance-based logistics.

Who Should Take This Training: This module is primarily intended for acquisition and logistics professionals.

Additional Course Information: Approximately 3 hours. 0 Continuous Education Units, 3 Continuous Learning Points, and 1 Reservist Retirement Points.

CLM 014 IPT Management and Leadership

Description: This module introduces management and leadership concepts used to organize, manage, and lead an integrated product team. Integrated product teams are used throughout the acquisition process to open the cross-functional and cross-organizational lines of communication and are formed for the specific purpose of delivering a product for a customer.

Additional Course Information: Approximately 8 hours. 0 Continuous Education Units, 8 Continuous Learning Points, and 2 Reservist Retirement Points.

CLM 031 Improved Statement of Work

Description: The Improved Statement of Work module will help professionals improve statements of objectives, statements of work, and performance work statements that are developed and evaluated by all acquisition career fields, including System Planning, Research, Development, and Engineering; Production Quality Management; Life Cycle Logistics; Program Management; and Test and Evaluation. Statement of work purpose, preparation, evaluation, and lessons learned are presented in this module so professionals understand and appreciate the critical role of requirements development in the acquisition process.

Additional Course Information: Approximately 4 hours. 0 Continuous Education Units, 4 Continuous Learning Points, and 1 Reservist Retirement Points.

CorePlus Development Guide Level 3

CLB 009 Planning, Programming, Budgeting, and Execution and Budget Exhibits – See previous description.

CLC 011 Contracting for the Rest of Us

Description: The “Contracting for the Rest of Us” module provides people who do not work in the Contracting career field with a basic knowledge of some of the essential processes and considerations that DoD Contracting professionals encounter to satisfy their customers’ requirements. The module also provides an introduction to some of the topics that are covered in greater depth in other Contracting continuous learning modules.

Who Should Take This Training: Non-contracting personnel.

Additional Course Information: Approximately 2 hours. 0 Continuous Education Units, 2 Continuous Learning Points, and 1 Reservist Retirement Points.

CLE 009 ESOH in Systems Engineering

Description: This module integrates the environment, safety, and occupational health (ESOH) considerations into the Department of Defense (DoD) Systems Engineering process. It is based on the requirements of DoD Instruction (DoDI) 5000.02, Operation of the Defense Acquisition System, and identifies the key ESOH activities that are conducted as part of Systems Engineering during each phase of the system's life cycle. DoDI 5000.02 requires programs to either eliminate identified hazards or reduce the associated risks to acceptable levels for hazards that cannot be eliminated.

Who Should Take This Training: This module is primarily intended for Systems Engineers, Project Managers, Logisticians, and Test and Evaluation personnel, ESOH subject matter experts, as well as other program technical Integrated Product Team members.

Additional Course Information: Approximately 3.5 hours. 0 Continuous Education Units, 4 Continuous Learning Points, and 1 Reservist Retirement Points.

CLE 066 System Engineering for Systems of Systems

Description: This Continuous Learning Module (CLM) is intended for program managers, project managers, systems engineers, technical team leaders, logistic support leaders, and others who are supporting SoS work, particularly as part of an SE team in an SoS environment. The goal of this module is to provide a resource for those in the systems engineering community by introducing the insights gained from lessons learned by today's acquisition community with regard to the issues and approaches to systems engineering (SE) for systems of systems (SoS).

Who Should Take This Training: Defense Acquisition Workforce members.

Additional Course Information: Approximately 4 hours. 0 Continuous Education Units, 4 Continuous Learning Points, and 1 Reservist Retirement Points.

CLL 012 Supportability Analysis

Description: The overall goal of this cross-functional module is to advance the knowledge and understanding of Supportability Analysis and how it is employed through all phases of the defense acquisition process. This course will examine Supportability Analysis (SA) process with a particular emphasis on Logistics and how the Life Cycle Logistician (LCL) will participate in the SA process and incorporate the results in product support planning.

Who Should Take This Training: This module is primarily intended for members of the life cycle logistics and systems engineering communities.

Additional Course Information: Approximately 4 hours. 0 Continuous Education Units, 4 Continuous Learning Points, and 1 Reservist Retirement Points.

CLL 014 Joint Systems Integrated Support Strategies (JSISS)

Description: The Joint Systems Integrated Support Strategies (JSISS) module addresses the importance of integrated support strategies to a joint acquisition program, as well as DoD guidance and policy relevant to the development of joint strategies. In addition, the module will inform participants of the challenges and issues that must be addressed when planning for an integrated joint support strategy.

Additional Course Information: Approximately 3 hours. 0 Continuous Education Units, 3 Continuous Learning Points, and 1 Reservist Retirement Points.

CLL 015 Product Support Business Case Analysis (BCA) – See previous description.

CLM 014 IPT Management and Leadership – See previous description.

CLM 031 Improved Statement of Work – See previous description.

CLM 032 Evolutionary Acquisition

Description: The Evolutionary Acquisition module is designed to introduce professionals to the ideas and principles of evolutionary acquisition, and teach professionals how to apply them in a rapidly changing environment.

Who Should Take This Training: T&E Career Field.

Additional Course Information: Approximately 2 hours. 0 Continuous Education Units, 2 Continuous Learning Points, and 1 Reservist Retirement Points.

CLR 151 Analysis of Alternatives

Description: This module presents the process used by the Department of Defense to conduct an Analysis of Alternatives in support of requirements, system acquisition and resourcing. The AoA is the analytical process that DoD organizations use to assess and prioritize potential materiel solutions to a validated military capability need. Who Should Take This Training: This course is designed for military officers O-3 through O-4, and civilians, GS-12 through GS-13, in the Program Management career field.

Who Should Take This Training: This module is designed primarily for individuals who lead or directly support Analyses of Alternatives (AoAs). The intended audience encompasses individuals in the DoD's and defense industry's requirements, acquisition and resourcing communities.

Additional Course Information: Approximately 3 hours. 0 Continuous Education Units, 3 Continuous Learning Points, and 1 Reservist Retirement Points.

CLR 250 Capabilities-Based Assessment

Description: CLR 250 is a comprehensive introduction to planning and organizing Capabilities-Based Assessments (CBAs). The module contains four lessons: CBA Definitions, Pre-Planning Research, CBA Team Building and Planning, and the CBA Study Phase. Graduates will have the knowledge, skills, and abilities to conduct and support effective and efficient Capabilities-Based Assessments (CBAs) in support of the Joint Capabilities Integration and Development System (JCIDS).

Who Should Take This Training: Professionals assigned to lead or to participate in CBAs.

Additional Course Information: Approximately 5 hours. 0 Continuous Education Units, 5 Continuous Learning Points, and 1 Reservist Retirement Points.

HBS 409 Decision Making

Description: Effective business decisions is a process that requires time and input from many individuals throughout an organization. In this module you'll learn to identify underlying issues related to a decision, generate multiple alternatives, evaluate those alternatives, and communicate and implement the decision.

Who Should Take This Training: All DoD acquisition workforce members

Additional Course Information: Approximately 2 hours. 0 Continuous Education Units, 2 Continuous Learning Points, and 0 Reservist Retirement Points.

HBS 427 Meeting Management

Description: This module is a timesaving guide to planning and conducting meetings from start to finish. It includes preparation, keeping the meeting on track, and follow-up. It gives expert advice for dealing with problem behaviors exhibited by meeting participants.

Who Should Take This Training: All DoD acquisition workforce members

Additional Course Information: Approximately 2 hours. 0 Continuous Education Units, 2 Continuous Learning Points, and 0 Reservist Retirement Points.

HBS 441 Team Management

Description: In this module you will learn about common problems that frequently throw a team off course and how to prevent them—or, if necessary, how to get a team back on track. Focus is essential to effective teamwork. Learn how to diagnose and overcome common problems - such as poor communication and interpersonal conflict - that can impede team progress, learn to take corrective measures to remove team problems and improve team performance.

Who Should Take This Training: All DoD acquisition workforce members

Additional Course Information: Approximately 2 hours. 0 Continuous Education Units, 2 Continuous Learning Points, and 0 Reservist Retirement Points.

PMT 251 Program Management Tools Course, Part I

Description: THIS DISTANCE LEARNING COURSE CONSISTS OF MODULES 1-8 OF THE FORMER PMT 250 COURSE. IF YOU HAVE COMPLETED PMT 250, YOU NEED NOT COMPLETE THIS COURSE. Program Management Tools provides application skills needed in a program office as an integrated product team lead. It is a follow-on course to ACQ 201B and is designed to enhance journeyman-level skills. This course prepares defense acquisition professionals for work in the Program Offices and for the Program Management Office Course, PMT 352, Parts A and B.

Who Should Take This Training: This course is designed for military officers O-3 through O-4, and civilians, GS-12 through GS-13, in the Program Management career field.

Additional Course Information: Approximately 60 calendar days. 0 Continuous Education Units, 50 Continuous Learning Points, and 13 Reservist Retirement Points.

Pre-Requisites: ACQ 201B, Intermediate Systems Acquisition, Part B.

PMT 257 Program Management Tools Course, Part II

Description: Program Management Tools provides application skills needed in a program office as an integrated product team lead. It is a follow-on course to PMT 251 and is designed to enhance journeyman-level skills. This course prepares defense acquisition professionals for work in the Program Offices and for the Program Management Office Course, PMT 352, Parts A and B.

Who Should Take This Training: This course is designed for military officers O-3 through O-4, and civilians, GS-12 through GS-13, in the Program Management career field.

Additional Course Information: Approximately 4.5 class days. 4.3 Continuous Education Units, 43 Continuous Learning Points, and 0 Reservist Retirement Points.

Pre-Requisites: ACQ 201B, Intermediate Systems Acquisition, Part B, PMT 251, Program Management Tools Course, Part I.

SYS 203 Intermediate Systems Planning, Research, Development, and Engineering, Part II

Description: This course allows students to use the DoD systems engineering processes and techniques learned in SYS 202. Participants will work in integrated product teams and apply systems engineering technical processes and technical management processes to a defense system as it gets developed across the various phases of the acquisition lifecycle.

Who Should Take This Training: This course is part of the Level II certification training requirement for the Systems Planning, Research, Development, and Engineering—Systems Engineering (SPRDE-SE) career field. Additionally, members of other career fields who require an understanding of how systems engineering is applied to systems acquisition and sustainment will benefit from this course.

Additional Course Information: Approximately 4.5 class days. 3.6 Continuous Education Units, 36 Continuous Learning Points, and 0 Reservist Retirement Points.

Pre-Requisites: ACQ 201B, Intermediate Systems Acquisition, Part B

SYS 202, Intermediate Systems Planning, Research, Development, and Engineering, Part I

CLE 003, Technical Reviews. At least 2 years of technical experience in an acquisition position to include industry or government equivalent from among the following career fields/paths is recommended: SPRDE—SE; SPRDE—S&TM; IT; T&E; PQM; PM; or LCL.

Additional Continuous Learning Modules

CLE 008 Six Sigma: Concepts and Processes

Description: Focusing on six sigma concepts most applicable to manufacturing and the management of industrial facilities, this module provides an in-depth overview of Six Sigma concept processes, the associated tools and how they can be applied to real-life situations for eliminating waste; and outlining various quality measurement methods.

Who Should Take This Training: The PQM career field and their counterparts in defense industry.

Additional Course Information: Approximately 8 hours. 0 Continuous Education Units, 8 Continuous Learning Points, and 2 Reservist Retirement Points.

CLM 029 Net Ready KPP

Description: This course is designed to help program managers gain exposure to NR-KPP development resources, with the ultimate goal of ensuring the necessary program interoperability and supportability and joint interoperability test certifications. The overall method for ensuring compliance with NR-KPP as proposed in this course will assist in achieving a net-centric environment.

Who Should Take This Training: T&E career field.

Additional Course Information: Approximately 3 hours. 0 Continuous Education Units, 3 Continuous Learning Points, and 1 Reservist Retirement Points.

Pre-requisites: This CLM is a prerequisite to take TST 302, Advanced Test and Evaluation.



Naval Sea Systems Command (NAVSEA)

NAVSEA builds, buys and maintains ships, submarines and combat systems for the U.S. Navy. This includes oversight for design, engineering, testing and lifecycle support of these systems. NAVSEA is comprised of more than 50,000 civilian and military personnel in 34 activities (i.e., headquarters, program offices, warfare centers and other field activities) located across the United States and other regions of the world. NAVSEA's mission is to ensure the highest quality products and engineering services to its customer base. NAVSEA is currently standardizing its training process by integrating new technologies into current courses and implementing new courses. In addition, NAVSEA is centralizing career path development to establish competencies within the workforce.

For registration and availability of T&E-related courses listed below, unless specified otherwise, please contact Anabell Ramos, Training Specialist, NSWC Port Hueneme: 805-228-0338, anabell.ramos@navy.mil.

Submarine Combat Systems

Description: The course covers current, as well as future, trends in submarine combat systems including: a brief review of submarine operations and trends from the Cold War period including key events and lessons learned, and key documents and events during the Post Cold War adjustment period 1990 – 2000) The key documents include: Navy Vision Statement “Forward.....from the Sea”, the series of Defense Science Board Studies, Joint Vision 2010/2020 and many others. The course will cover advanced SSN/SSGN payloads and the Navy experimentation process. The recommendations of the CNO’s ASW Team A and B will be addressed in terms of the future implications.

Who Should Take This Training: Engineers, scientists, technicians.

Additional Course Information: For registration and availability please contact Ms. Kim Hall, NUWC Division Newport, (401) 832-3904, kim.hall1@navy.mil.

Scientist to Sea Program

Description: Scientist at Sea offers context-based training reinforced with a deckplate experience in an actual warfare environment (submarine or surface ship) to give more personnel an understanding of platforms, systems and fleet operations. Through collaboration and sharing of experiences, the participants will gain an understanding of the fundamentals of naval warfare from the sensor to the shooter.

Who Should Take This Training: New employees (less than 3 years at NUWC) and an Acquisition Workforce (DAWIA) member.

Additional Course Information: None. For registration and availability please contact Ms. Kim Hall, NUWC Division Newport, (401) 832-3904, kim.hall1@navy.mil.

Introduction to Electro-Optic & Infrared Sensors (EO/IR)

Description: This course focuses on EO/IR technology and its applications in defense systems. Whether a stand alone or in a support role, EO/IR proliferation into modern systems necessitates broader understanding of this technology by program and project managers, systems analysts engineers and technicians who are involved directly in EO/IR bases systems or work with multimode systems employing EO/IR technology in some of its functions.

Who Should Take This Training: Project managers, systems analysts engineers and technicians who are involved directly in EO/IR base systems.

Additional Course Information: This course is held in classroom. The length is 3, 18 hours, 18 Continuous Learning Points.

Electronic Warfare

Description: This is a practical course in which the basic concepts and techniques of Electronic Warfare are presented and the students learn how to apply them to practical problems. The class will cover the general scope of structure of electronic warfare, electromagnetic reconnaissance and analysis ESM, ECM, ECCM, radar theory and practice, modern communication signal structure (including low probability of intercept modulations). Noise jamming of both radars and communication and deceptive jamming techniques will be taught. The principles of radar cross section and RCS reduction are included. Specific emphasis will be given to anti-ship missile attacks and the various defensive measures and techniques employed.

Who Should Take This Training: Individuals who are new to EW field as well as EW officers, Engineers, System Designers and users who work with Electronic Warfare, Radar and Command Control and Communication Systems.

Additional Course Information: This course is held in classroom. The length is 4 days, 32 hours, 32 Continuous Learning Points.

Test & Evaluation

Description: This course presents basic information about DoD Modeling & Simulation (M&S) resources, organizations, policies and processes, and how these support test and evaluation (T&E) activities relate to the acquisition process. The tutorial is designed for anyone in the T&E and Acquisition communities with responsibilities that include the application of M&S to their organization's activities. Students will be able to describe the integration of M&S at different stages of system development, and the capabilities and applications for M&S tools and techniques in each of these stages.

Who Should Take This Training: Engineers, scientists, managers and technicians.

Reliability, Maintainability, and Availability

Description: This course presents a practical review of Reliability, Maintainability, and Availability by presenting an overview of acquisition policy and its application in the design and development of equipment and systems. Topics covered include: DoD RM&A Policy; Mission Profiles; System Level RM&A Allocations and Predictions; FMECAs; Detailed R&M Design Predictions; R&M Verification and Data Collection and Analysis; and COTS RM&A Tasks. The open seminar and practical exercises

format of this course allows for maximum information to be presented while allowing for questions, discussions, and in-class examples and exercises to maximize the students' overall learning experience.

Who Should Take This Training: Engineers, scientists and technicians.

Additional Course Information: Course available online through DAWIA (Course # CLE 301).

Modeling & Simulation for Systems Engineering

Description: Simulation is the process of designing a model of a system and conducting experiments to understand the behavior of the system and/or evaluate various strategies for the operation of the system. Modeling & Simulation has become an important tool in all phases of the acquisition process, and can be used within most Systems Life Cycle Processes, including Requirements Analysis, Architectural Design, Design & Development, Test and Verification, and Operations and Maintenance. This introduction to M&S for systems engineers focuses on modeling, simulation methodologies, foundational technologies, design issues, and how M&S is used in each phase of the systems engineering life cycle.

Who Should Take This Training: Engineers, scientists, managers and technicians.

Additional Course Information: Course available commercially.

Modeling & Simulation for Radar Systems Engineering

Description: Develop techniques for modeling & simulation of modern radars applicable their systems design, analysis, test & evaluation, and performance assessment. Begin with the radar equation, then extend modeling & simulation to introduce general radar subsystems (transmitters, receivers, and antennas). Explore phenomenology (propagation and clutter), target physics (RCS and dynamics), and electronic attack to develop the radar modeling & simulation and for the further development of modeling & simulation scenarios.

Who Should Take This Training: Engineers, scientists, managers and technicians.

Additional Course Information: The course uses MATLAB and Simulink for the modeling and simulation.

Pre-requisites: Principles of Modern Radar and Basic Radar Concepts.

T&E Modeling & Simulation

Description: Develop techniques for modeling & simulation of modern radars to apply to radar systems design, analysis, test & evaluation, and performance assessment. Begin with the radar equation, then extend modeling & simulation to introduce general radar subsystems (transmitters, receivers, and antennas). Explore phenomenology (propagation and clutter), target physics (RCS and dynamics), and electronic attack to develop the radar modeling & simulation and for the further development of modeling & simulation scenarios.

Who Should Take This Training: Individuals who are new to the Electronic Warfare Modeling and Simulation field, or who have been working in a narrow technical field in support of EW T & E and need a broader understanding of the field.

Additional Course Information: This course is held in classroom. The length is 4 days, 32 hours, 32 Continuous Learning Points.

Pre-requisites: Some knowledge of probability and statistics would be helpful but not necessary.

Principles of T&E

Description: This two day workshop is an overview of test and evaluation from product concept through operations. The purpose of the course is to give participants a solid grounding in practical testing methodology for assuring that a product performs as intended. The course is designed for Test Engineers, Design Engineers, Project Engineers, Systems Engineers, Technical Team Leaders, System Support Leaders Technical and Management Staff and Project Managers. The course work includes a case study in several parts for practicing testing techniques.

Who Should Take This Training: Engineers, scientists, and technicians.

Additional Course Information: This course is held in classroom. The length is 2 days, 16 hours, 16 Continuous Learning Points.

Design of Experiments

Description: This course presents techniques for planning studies where the inputs to a system/process can be varied in a designed way and the outputs observed. Efficient planning and analysis methods for determining which inputs have statistically significant effects on outputs are covered, including analysis of variance, full and fractional factorial experiments, blocking, randomization, and robust design. The course includes hands-on experience using statapults for classroom experiments. Other classroom projects will use computer simulations set-up by the students and run by the instructor. The course will cover lean six-sigma principles, output variance control, output mean control, and transfer function derivation. Students will be introduced to simulation techniques that accommodate inputs with varying quality distributions.

Who Should Take This Training: Engineers.

Additional Course Information: This course is held in classroom. The length is 3 days, 24 hours, 24 Continuous Learning Points.

Pre-requisites: Some knowledge of probability and statistics would be helpful but not necessary.

Laser Weapons Systems Short Course

Description: This course emphasizes concepts, terminology, current technology capabilities, and systems concepts. The course does not develop key relationships from first principles. Limitations on the effectiveness of HEL weapons and key performance trade-offs are addressed. Applications of these concepts to current systems include the historical Airborne Laser Laboratory, Airborne Laser, Tactical High-Energy Laser, Advanced Tactical Laser, and Space-Based Laser programs. The course includes a number of extended worked problems, including simplified calculations of weapon effectiveness for a high altitude, long-range, air-to-air engagement and a short-range tactical scenario.

Who Should Take This Training: This course is intended for scientists and engineers with a bachelor of science degree. However, many undergraduate students and non-degreed technicians often find the more conceptual material valuable.

Additional Course Information: This course is held in classroom. The length is 4 days, 32 hours, 32 Continuous Learning Points.



Naval Air Systems Command (NAVAIR)

NAVAIR's mission is to provide full life-cycle support of naval aviation aircraft, weapons and systems operated by Sailors and Marines. This support includes research, design, development, and systems engineering; acquisition; test and evaluation; training facilities and equipment; repair and modification; and in-service engineering and logistics support.

Reflecting the breadth and depth of the AIR-5.0 Competency, Naval Aviation Test and Evaluation University (NATEU) is a national institution, providing classroom training at NAS Patuxent River, MD, China Lake, Point Mugu, CA, and Orlando, FL naval installations. NATEU provides a synergistic training solution to the members of the Naval Aviation T&E workforce. The courses in this section are grouped by Programs of Study, each with a set of core and specialty courses. Required and Elective courses for NAVAIR courseware associated with the T&E program of study should be based on the latest NATEU Catalog found at: <https://nateu.navair.navy.mil> (accessing this website requires a CAC card).

For registration and availability of T&E-related courses listed below, unless specified otherwise, please contact Lori Jameson, NAVAIR 5.1E at lori.jameson@navy.mil, or (301) 342-8300.

Mission Systems Test & Evaluation Program of Study

Curricula in Mission Systems T&E covers the resources required for full life cycle test and evaluation of all integrated avionics systems as installed in all aircraft including Unmanned Aerial Vehicles (UAVs), commercial derivative platforms, and interoperable off-board systems. Provide the resources for experimentation test in support of technology development for mission systems.

Core Courses

AWT-100 Airworthiness for Testers

Description: This course is a follow-on to the TP-100/200/300 Test Planning course in which students learn that whenever a new weapon, weapon system, or aircraft system is developed for an aircraft, or when a current weapon, weapon system, or aircraft system is modified from the approved Fleet configuration, three specific processes must be completed prior to the start of developmental flight testing: (1) modification approval by the appropriate authority; (2) airworthiness approval obtained for the new configuration; and; (3) test plan approval by the appropriate authority.

Additional Course Information: 1 day.

ITE-100 Indoctrination to Test & Evaluation

Description: Students receive an introduction and familiarization to NATEU, U.S. Navy, NAVAIR, and AIR-5.1 along with related subject areas that FTEs are exposed to within the T&E environment. Topics include the Defense Acquisition System, Military Ranks and Insignias, Flight Line and Deck

Safety, Operational Risk Management (ORM), and Test and Evaluation. Students develop a deeper understanding and appreciation for the T&E structure in which they will work.

Additional Course Information: 2 days.

FTB-100 Flight Test Basics

Description: Students receive an introduction and familiarization to the basics of flight testing and the fundamentals necessary to perform effectively and safely in the T&E environment. Topics include Course Rules, Instrumentation, Flight Planning, Naval Air Training and Operating Procedures Standardization (NATOPS)/Pocket Check List (PCL), Mission and Weapons Systems, Carrier Suitability, and Air Vehicle Stores Capability, to name a few. The core material includes classroom instruction leading to a flight and simulator exercise that prepares students for an instructional, real-world test event.

Additional Course Information: 4 days.

TP-100 Test Planning

Description: Students receive an introduction and familiarization to test planning, requirements, roles and responsibilities, content, review and approval, and test plan amendments. Students will review NAVAIR Instruction 3960.4 and Test Planning Handbook, associated references, test plan development processes, and the products required to plan and document effective and safe tests. The core material includes classroom instruction, case studies, and test plan writing exercises. Students develop the conceptual tools required to produce a formal test plan.

Additional Course Information: 3 days.

TR-100 Test Reporting

Description: Students receive an introduction and familiarization to test reporting, philosophy, daily reports, deficiency reports, Report of Test Results (RTR), critical thinking, and other test reports. Students will review NAVAIR Test Reporting Instruction 3905.1 and Test Reporting Handbook, associated references, processes, and products required to collect, analyze, and effectively report on the results of a test. Both informal and formal test reports are covered. The core material includes classroom instruction and report writing exercises. Students develop the conceptual tools required to produce a test report.

Additional Course Information: 2.5 days.

Specialty Courses

AIA-210 Radar (American Institute of Aeronautics and Astronautics)

Description: This class explores radar principles and applications, including a review of the required background material, the introduction of basic radar theory and techniques, and discussion of several radar systems and applications. The course is self-contained in that all of the background material is included. The material is suitable for anyone having some calculus and a calculus based physics course.

Additional Course Information: 3 days.

ATI-210 Fundamentals of Link 16/JTIDS/MIDS (Applied Technology Institute)

Description: The Fundamentals of Link 16/JTIDS/MIDS is a comprehensive course designed to give the student a thorough understanding of every aspect of Link 16 both technical and tactical. The course is designed to support both military and industry and does not require any previous experience or exposure to the subject matter. The course comes with one-year follow-on support, which entitles the student to contact the instructor with course related questions for one year after course completion.

Additional Course Information: 2 days.

CVS-200 Introduction to Carrier Suitability Training

Description: This 3 day class provides Carrier Ship Suitability Flight Test Engineers with the basic technical knowledge required to plan and execute ship suitability flight test projects. Topics will include design considerations for carrier airplanes, types of launch and recovery equipment, ship suitability test facilities and resources, types of ship suitability testing, safety and lessons learned, and aircraft carrier organization and protocol.

Additional Course Information: 3 days, in development.

EOS-200 Introduction to Electro-Optic Systems

Description: This course introduces students to electro-optic systems including infrared (IR), Forward Looking Infrared (FLIR), and Infrared Search and Track (IRST) Systems. Topics include current system descriptions and why they are used. Course materials include test equipment, types of tests performed, and sample data for critical analysis.

Additional Course Information: In development.

GIT-210 Design of Experiments (Georgia Institute of Technology)

Description: Design of Experiments (DOE) allows calculation of the equations that relate output(s) and the variability of output(s) to the input variable levels. Learn the techniques for planning studies in which the inputs to a system/process can be varied and the outputs observed. Explore efficient planning and analysis methods for determining which inputs have statistically significant effects on outputs and output variability, including analysis of variance, full and fractional factorial experiments, randomization, and robust design. Gain hands-on experience using Statapults, computer games, and simulations. Observe DOE solutions using various software packages, including DOE PRO, MINITAB, or MATLAB. Explore simulation techniques that accommodate inputs with varying probability distributions.

Additional Course Information: 3 days.

GIT-211 Multi-Sensor Data Fusion (Georgia Institute of Technology)

Description: Accurate and efficient management of information on the battlefield is vital for successful military operations. Integrating and interpreting data is an emerging technology, commonly referred to as data fusion. The power to exploit all relevant information rapidly and effectively is at the core of the Net-Centric Operations (NCO) paradigm. To further advance the knowledge and work on data fusion, the military will need to identify concerns in technological

advancement, analyze current and future requirements, as well as overcome the major challenges faced, and how these challenges can be resolved.

Additional Course Information: 3 days.

LEA-200 Lethality Analysis

Description: This short course provides knowledge and understanding of the lethality analysis for variety of programs.

Additional Course Information: 2 hours, in development.

MTL-210 MATLAB Basics (The MathWorks, Inc.)

Description: MATLAB Basics is intended for personnel with little or no Matrix Laboratory (MATLAB) experience and users who'd like to brush up on their skills. Through hands-on demonstrations and exercises, students will learn MATLAB basics as well as programming techniques that are useful for flight-test data analysis. The class covers navigating through the MATLAB environment; reading in flight-test data; writing functions to process data; interacting with the data; writing results to an output product; altering graphical output; basic matrix operations and array usage; implementing string manipulation; using structures and cell arrays; MATLAB's built-in mathematical functions; conducting relational/logical operators; programming in the MATLAB scripting language; input-output and plotting operations; and low-level graphics creation.

Additional Course Information: 2 hours.

MTL-211 Advanced MATLAB (The MathWorks, Inc.)

Description: Advanced MATLAB is directed toward flight test engineers, test managers, civilian, and military within the NAVAIR 5.0 Test & Evaluation organization. This unique training opportunity combines MATLAB for data processing and visualization, programming techniques, and building graphical user interfaces (GUIs). This training focuses on details of data management and visualization techniques, creating scripts, writing efficient and well-organized code, and effective use of interface controls.

Additional Course Information: 3 days, in development.

MTL-212 Image Processing (The MathWorks, Inc.)

Description: Image Processing for MATLAB is directed toward flight test engineers, test managers, civilian, and military within the NAVAIR 5.0 Test & Evaluation organization. This unique training opportunity introduces different methods for extracting features and objects within an image, image registration, and reconstructing images and objects. Further more students will explore the different types of image representations, as well as how to enhance image characteristics, filter an image, and reduce the effects of noise and blurring in an image.

Additional Course Information: 2 days, in development.

MTL-213 Signal Processing – Electronic Warfare (The MathWorks, Inc.)

Description: Electronic Warfare (EW) is directed toward flight test engineers, test managers, civilian, and military within the NAVAIR 5.0 Test & Evaluation organization. This customized signal training will teach students how to analyze signals and design signal processing systems using EW. Student

will learn how to create and analyze signals, use different spectral analysis tools, design and analyze filters and address filter implementation issues.

Additional Course Information: 2 days, in development.

MTL-214 Signal Processing for MATLAB (The MathWorks, Inc.)

Description: Signal Processing for MATLAB is directed toward flight test engineers, test managers, civilian, and military within the NAVAIR 5.0 Test & Evaluation organization. This unique training opportunity shows how to analyze signals and design signal processing systems using MATLAB, Signal Processing Toolbox, and Filter Design Toolbox.

Additional Course Information: 2 days, in development.

MTL-215 Simulink-Aero/Controls (The MathWorks, Inc.)

Description: Simulink-Aero/Controls is directed toward flight test engineers, test managers, civilian, and military within the NAVAIR 5.0 Test & Evaluation organization. This three-day training opportunity provides custom training geared towards beginner system and algorithm modeling and design in Simulink. Through basic modeling techniques and tools, it shows how to develop Simulink block diagrams. Students will learn modeling single-channel and multichannel discrete-time systems, implementing sample-based and frame-based processing, and developing custom blocks and libraries. This course will also explore a validating designs using Simulink.

Additional Course Information: 2 days, in development.

NAV-200 Navigation

Description: This 5 day class provides an overview of topics pertinent to test and evaluation of navigation avionics in naval aircraft. Topics include: time and distance measurement, geodesy, geomagnetics, gyroscopics, and various self-contained and externally-referenced sensors/systems that comprise an aircraft navigation suite (Global Positioning System (GPS), inertial navigation units, ground-based radio-navigation aids, etc). The class also touches on test philosophy, available test tools, and data analysis techniques while characterizing attributes pertinent to navigation avionics.

Additional Course Information: 5 days.

NCS-210 Link 16/JTIDS/MIDS Advanced (L16/F Level 4 (National Communication Systems))

Description: The Link 16/JTIDS/MIDS Advanced course teaches 31 instructional modules covering the most important topics necessary to develop a thorough understanding of Link 16/JTIDS/MIDS. This course is instructional in nature and does not involve hands-on training. This course is suitable for personnel with little or no experience and is designed to take the student to a very high level of comprehension in a short period of time.

Additional Course Information: 3 days.

NPS-210 Sonar Equations Short Course (Naval Post Graduate School)

Description: A discussion of each term of the sonar equations, with application to the detection, localization, and classification of underwater vehicles. Starting with the physics of sound, this course delves into ray acoustics, simple transmission loss models, normal mode theory, sources and

receivers, the characterization of noise in the ocean, Doppler shifts, and detection thresholds. Course requires knowledge of trigonometry, logarithms, and geometry.

Additional Course Information: 10 days.

NTG-210 Radio Frequency Interface and Jamming Issues for NAVAIR

Description: RFI and jamming issues for NAVAIR includes instruction on jamming and spoofing threats and unintentional RF interference. An overview of anti-jam design techniques is explored along with an analysis of RFI effects and GPS interference in aviation. Case studies of terrorist and military scenarios apply knowledge to real-world environments. Course material covers land mobile and maritime systems and GPS receiver vulnerabilities and mitigation approaches.

Additional Course Information: 2 days.

NTG-211 GPS High Precision Kinematic Carrier Phase Techniques (NavTechGPS)

Description: High accuracy Global Positioning System (GPS) positioning provides users accuracies down to the CM level very effectively. Day one describes the basic concepts involved, and the various receiver technologies and observables available to obtain high accuracy positions. Day two addresses the various errors affecting GPS, and how to estimate many of them using simple field experiments. It also presents some fundamental aspects of estimation theory; and describes the various Differential Global Positioning System (DGPS) methods and approaches, with real-time implementation implications. Day three focuses on using GPS in a variety of applications environments with high precision requirements. Numerous case studies are presented to illustrate the principals involved.

Additional Course Information: 3 days.

RAD-200 Radar/ARDS Tracking Data Systems/EATS Tracking Systems/TSPI Data

Description: This course provides knowledge and understanding of the NAWCWD radar tracking systems, Advanced Range Data System/Extended Area Tracking System (ARDS/EATS), and TSPI data requirements for a variety of NAVAIR and NAVSEA programs. Course material includes a tour of the ARDS pods facility.

Additional Course Information: 4 hours.

TAR-200 Target Capabilities

Description: This short course provides knowledge and understanding of the target capabilities at NAWCWD.

Additional Course Information: 4 hours, in development.

TP-200 Test Planning for T&E Managers

Description: This class examines the roles and responsibilities of senior level managers in test planning and allows participants to review the same techniques and processes that are presented to junior level FTEs in TP-100. This class presents a synopsis of material instructed in TP-100 and provides branch head level training on test plan requirements, content, review process, as well as an opportunity for branch heads to interact with Chief Flight Test Engineers. It also presents an overview of differences between the 3960.4B and C versions of the Test Planning Instruction.

Additional Course Information: 1 day course.

TPS-210 Introduction to Aircraft and Systems T&E (Test Pilot School)

Description: The Introduction to Aircraft and Systems Test & Evaluation short course consists of three training phases that are designed to introduce and expose students to integrated systems flight test methods and techniques. First, students will receive a series of technical lectures on airborne systems basics and flight test techniques, theory for RADAR, Electro-Optical, Displays, and Navigation systems, and planning and executing test flights. Second, students will be exposed to preparation and conduct of a 3-hr training sortie on the USNTPS Airborne Systems Training and Range Support (ASTARS) aircraft. During the sortie the students will evaluate the integrated systems in support of a mock mission, which will be defined in the TPS-provided test plan. Students will be expected to evaluate the integrated systems using techniques presented throughout the academic and technical lectures. The final phase will include a post-flight group debrief, review of data collected during the sortie, classification and reporting on deficiencies discovered during the training sortie, and providing a group oral presentation to the students and instructors. The oral presentation will be approximately 30 minutes in length, focusing on proper presentation of flight test results.

Additional Course Information: 10 days.

TPS-211 Introduction to Unmanned Aerial Systems Flight Test (Test Pilot School)

Description: The Introduction to UAS flight test short course consists of three training phases that are designed to introduce and expose students to UAS flight test methods and techniques. First, students will receive a series of technical lectures on planning and executing test flights, fundamentals of ground control station design, instrumentation, and specific component testing. Second, students will be exposed to several UAS aircraft, including specific platform briefings from program managers or senior project engineers. Lessons learned from various UAS test programs will also be discussed during this phase. The final phase consists of "hands-on" evaluation with UAS platforms. A flight period will be provided during the second week to allow students to interact with a UAS ground control station and expose students to UAS flight test operations by executing a simple UAS flight test.

Additional Course Information: 10 days.

TPS-212 Introduction to Airplane Flying Qualities T&E (Test Pilot School)

Description: The USNTPS Introduction to Airplane Flying Qualities Short Course consists of three phases that are designed to introduce and expose students to classic stability and control theory, test methods and techniques, and the qualitative evaluation process. First, the students receive a series of classroom lectures on test planning, basic aerodynamics, aircraft flight controls, longitudinal and lateral-directional flying qualities to include test procedures and techniques, the handling qualities rating scale, and report writing. Second, each student receives two simulator sessions in the USNTPS sim (simulation) lab. The first session provides hands-on experience with basic flight control system mechanical characteristics. The second session permits a formal review and time to practice the test techniques prior to the flight demonstration phase. Finally, each student will conduct a limited scope evaluation of the longitudinal and lateral-directional flying qualities of a general aviation aircraft for the VIP Transport Mission. The students will fly with an experienced Contractor Instructor Pilot (CIP) that will be able to discuss the basic mission tasks, demonstrate test techniques and the use of the handling qualities rating scale, and answer student questions regarding data collection and test tolerances. Following the flight, the students will reduce

and analyze the qualitative and quantitative data that was collected during the evaluation flight and produce a Daily Flight Report.

Additional Course Information: 10 days.

TPS-213 Introduction to Rotary Wing Flying Qualities & Performance

Description: The USNTPS Introduction to Airplane Flying Qualities Short Course consists of three phases that are designed to introduce and expose students to classic stability and control theory, test methods and techniques, and the qualitative evaluation process. Entry-level (Beginner) exposure to aerodynamics, static and dynamic stability, maneuvering and non-maneuvering flight characteristics, flight control systems, control types, handling qualities and ratings scales, history and lessons learned, test planning, test execution and reporting, and conduct of a practical flight test event.

Additional Course Information: 10 days.

TR-200 Test Reporting for T&E Managers

Description: This class examines the roles and responsibilities of senior level managers in test reporting that focuses on the philosophy, daily flight reports, deficiency reports, Report of Test Results (RTR), critical thinking, methods, techniques, and tools for reporting of test results. This is a process-level class, designed to provide managers and senior level personnel with a current understanding and guidance on test reporting. This class also acts as a refresher for managers and senior personnel to review the test reporting process and test documents.

Additional Course Information: 3 days.

TRV-200 Introduction to the TRDVC Process

Description: This class provides an overview of the Test Requirements Definition, Validation and Concurrence (TRDVC) 12-step process for Test Teams using NAVAIR ranges, infrastructure, and people. Topics include familiarization and overview of the TRDVC process to establish a standard methodology for tracing requirements to test objectives and build a requirements-based test program using a logical sequence of steps. Students gain knowledge on how to reduce late additions of test requirements through a standard and logical approach, and to document the requirements for all testing by implementing a methodical process of requirements traceability early in a program.

Additional Course Information: 4 hours, in development.

TSI-210 MIL-STD-1553 Seminar (Test Systems Inc.)

Description: MIL-STD-1553, the military standard that defines the mechanical, electrical, and functional characteristics of a serial data bus is explored. Topics include an introduction, evolution, and history of the applications used. Students learn definitions, encoding formats, and ways to decode words and identify message formats. Hardware and software characteristics design are covered along with the philosophy and phases of testing. Operating methods discussed are Bus Controller, Remote Terminal, and Bus Monitor operation. An overview of test equipment includes: functional requirements, common interface requirements, Remote Terminal tester, Bus Controller tester, Bus Monitor, bus activity simulator, and an overview of available test equipment. Labs time enables students to practice trouble-shooting remote terminal problems.

Additional Course Information: 3 days.

WBB-210 How Washington Works (Whitney, Bradley, and Brown, Inc.)

Description: This course focuses on three main areas: Capabilities-Based Planning/ Joint Capabilities Integration and Development System (JCIDS); Planning, Programming, Budgeting and Execution (PPBE); and Acquisition. Specifically covered is an in-depth examination of the DoD, Joint Staff, and Armed Service organizations as well respective activities related to the formulation and articulation of the capabilities-based planning process. This course also reviews to the CJCSI 3170 series which directs JCIDS. Additionally, the PPBE process is examined in detail, highlighting the processes and the roles of war fighter, service staff, Joint Staff, DoD, and Congress. Also examined are the organizations and processes associated with DOD 5000 and acquisition reform initiatives; contrasting theory and practice.

Additional Course Information: 2 days.

Manned and Unmanned Air Vehicle Evaluation Program of Study

The program of study in the Manned and Unmanned Air Vehicle Evaluation area will cover AIR-5.1.6 resources for full life cycle test and evaluation of manned and unmanned air vehicle systems from an engineering suitability and effectiveness perspective. Electronic, hydraulic, mechanical, and aeromechanical systems such as propulsion, flight controls, displays, armament systems, as well as shipboard aircraft launch and recovery equipment will be covered in specialized training. Topics include identification of critical pro-gram test elements, translating engineering test requirements into test plans, conduct of tests, engineering analysis of test data, and reporting of test results in the area of manned and unmanned air vehicle systems.

Core Courses

AWT-100 Airworthiness for Testers – See previous description.

ITE-100 Indoctrination – See previous description.

FTB-100 Flight Test Basics – See previous description.

TP-100 Test Planning – See previous description.

TR-100 Test Reporting – See previous description.

Specialty Courses

ALB-200 Air Launched Ballistics Overview

Description: This class provides an overview of the Air Launched Ballistics and Weapon Employment Data Branch technical areas. Upon completion of this unit of instruction students should have a general knowledge of the basics and processes needed to complete AIR-5.1.6.9 specific general KASs. Topics will include overviews of in-house software models, development processes, Safe Escape, and weapon basics as it pertains to AIR-5.1.6.9 activities.

Additional Course Information: In development.

FLU-200 Introduction to Flutter

Description: This course will provide a brief introduction of the aeroelastic phenomenon known as “Flutter”, and an overview of the integrated approach used by major aircraft development programs to ensure that the aircraft are free of flutter. Topics will include design requirements, analysis techniques, wind tunnels test methods, ground test methods, and flight test methods. This course was designed for flight test engineers and managers who are interested in becoming familiar with this complex and challenging field.

Additional Course Information: 1 day.

GIT-210 Design of Experiments (Georgia Institute of Technology) – See previous description.

LEA-200 Lethality Analysis – See previous description.

MTL-210 MATLAB Basics – See previous description.

MTL-211 Advanced MATLAB – See previous description.

MTL-212 Image Processing – See previous description.

MTL-213 Signal Processing – See previous description.

MTL-214 Signal Processing for MATLAB – See previous description.

MTL-215 Simulink-Aero/Controls – See previous description.

RAD-200 Radar/ARDS Tracking Data Systems/EATS Tracking Systems/TSPI Data – See previous description.

SPE-210 Mass Properties (Space Electronics)

Description: The seminar covers the following subjects: definition of mass properties, Center of Gravity (CG), Moment of Inertia (MOI), Product of Inertia (POI), measurement techniques and theory, an introduction to the KSR6000 Mass Properties Instrument, CG measurement, MOI measurement, identifying coordinate systems, sources of measurement uncertainty, and fixturing.

Additional Course Information: 3 days.

TAR-200 Target Capabilities – See previous description.

TP-200 Test Planning for T&E Managers – See previous description.

TPS-210 Introduction to Aircraft and Systems Test & Evaluation – See previous description.

TPS-211 Introduction to UAS Flight Test – See previous description.

TPS-212 Introduction to Airplane Flying Qualities Test & Evaluation – See previous description.

TPS-213 Introduction to Rotary Wing Flying Qualities & Performance – See previous description.

TR-200 Test Reporting for T&E Managers – See previous description.

TRV-200 Introduction to the Test Requirements Definition, Validation, and Concurrence (TRDVC) Process – See previous description.

VIS-210 Strain Gage Technology Workshop (Vishay)

Description: In this comprehensive, hands-on Workshop, participants make several complete strain gage installations, including electrical connections, check-out, and environmental protection; and use appropriate readout instrumentation to verify results of their own installations. A wide range of strain measuring instrumentation is described in detail, and guidelines for proper instrument selection and usage are thoroughly reviewed. Participants have an opportunity to examine and familiarize themselves with all instruments on display. In the instrumentation portion of the program, some electrical circuitry is discussed.

Additional Course Information: 2 days.

WBB-210 How Washington Works – See previous description.

Weapons Evaluation Program of Study

Study in AIR-5.1.8 Weapons Evaluation covers the resources for full life cycle test and evaluation engineering, including planning, conducting, evaluating, and reporting test results of kinetic and directed energy weapons systems in key warfare areas including Battlespace, Air Warfare, Strike Warfare, Surface Warfare, and Cruise Missiles. Responsible for identification of critical program experiments and test elements; translating engineering test requirements into test plans; conduct of test; engineering veracity of test data; and reporting of test results in the area of weapons systems use and effect, and technology exploration. Responsible for definition of functional requirements for future test facilities, equipment, and instrumentation systems.

Core Courses

AWT-100 Airworthiness for Testers – See previous description.

ITE-100 Indoctrination – See previous description.

FTB-100 Flight Test Basics – See previous description.

TP-100 Test Planning – See previous description.

TR-100 Test Reporting – See previous description.

Specialty Courses

AMR-200 Introduction to AMRAAM

Description: Students receive an introduction and familiarization to the Advanced Medium-Range Air-to-Air Missile (AMRAAM). Includes topics such as: history and modifications, Concept of Operations (CONOPS), mission and planning, system descriptions, features, lineage, navigation, switchology, lessons learned, and additional topics TBD.

Additional Course Information: In development.

EWP-200 Electronic Warfare Compatibility - T&E Principles

Description: This class provides the principles of T&E associated with electronic warfare compatibility. This instructional material, designed for advanced/journeymen personnel, covers planning, testing, and analyzing effects of Electromagnetic Interference (EMI) on communication radios, UAVS, and other Blue Force equipment that utilize Radio Frequency (RF); focusing in particular on EMI effects on Blue systems and Hardware-in-the-Loop (HWIL) testing of these RF effects. The core material is composed of lectures, five (5) class exercises, tour of testing activities, and a hands-on bench testing in the laboratory along with bench calibration instruction. Students will develop the conceptual tools, knowledge, and skills along with the processes involved to collect, analyze, and report data.

Additional Course Information: 3 days.

GIT-210 Design of Experiments (Georgia Institute of Technology) – See previous description.

JMP-200 Introduction to Joint Mission Planning System

Description: The Joint Mission Planning System (JMPS) is the replacement for all U.S. military unit mission-planning systems, providing an integrated planning capability for aircraft, weapon and sensor missions intended for both fixed, rotary wing aircraft and unmanned aerial vehicles (UAVs). This class provides students with an introduction and familiarization to the JMPS software program, architecture, data links, mission planning environment (MPE), applicability of JMPS to support required testing, Tactical Aircraft Mission Planning System (TAMPS) and Air Force Mission Support System (AFMSS) interfaces with JMPS, and platform/weapon/sensor specific functionality provided by JMPS Unique Planning Components. Students are provided with a route planning simulation exercise with realistic scenarios to practice using the software tools, route planning, and organizing data using the system.

Additional Course Information: In development.

LEA-200 Lethality Analysis – See previous description.

MTL-210 MATLAB Basics – See previous description.

MTL-211 Advanced MATLAB – See previous description.

MTL-212 Image Processing – See previous description.

MTL-213 Signal Processing – Electronic Warfare – See previous description.

MTL-214 Signal Processing for MATLAB – See previous description.

MTL-215 Simulink-Aero/Controls – See previous description.

RAD-200 Radar/ARDS Tracking Data Systems/EATS Tracking Systems/TSPI Data – See previous description.

SLM-200 Introduction to SLAM-ER/Harpoon

Description: Students receive an introduction and familiarization to the Standoff Land-Attack Missile -Expanded Response (SLAM-ER)/Harpoon missile. Course includes topics such as: history and

modifications, Concept of Operations (CONOPS), mission and planning, system descriptions, features, lineage, navigation, switchology, lessons learned, and additional topics TBD.

Additional Course Information: In development.

TAR-200 Target Capabilities – See previous description.

TOM-200 Introduction to Tomahawk Cruise Missile - T&E

Description: Students receive an introduction and familiarization of the Tomahawk cruise missile. Students are presented with a variety of topics from the history and evolution through flight test, planning, execution, and evaluation process of Tomahawk Test and Evaluation. Students will gain an in-depth understanding of the Tactical Tomahawk Weapon Control System (TTWCS) aboard the firing units and their functions for launching Tomahawk cruise missiles; Tomahawk mission planning, validation, strike planning and execution processes; missile configurations, subsystems and their functions, and Tomahawk flight test operations that concentrate on flight test planning, execution, and evaluation for the Tomahawk Test and Evaluation Team. At completion of this instruction, students receive a tour of the AST-5B laboratory.

Additional Course Information: In development.

TP-200 Test Planning for T&E Managers – See previous description.

TPS-210 Introduction to Aircraft and Systems Test & Evaluation – See previous description.

TPS-211 Introduction to UAS Flight Test – See previous description.

TPS-212 Introduction to Airplane Flying Qualities Test & Evaluation – See previous description.

TR-200 Test Reporting for T&E Managers – See previous description.

TRV-200 Introduction to the Test Requirements Definition, Validation and Concurrence (TRDVC) Process – See previous description.

WBB-210 How Washington Works – See previous description.

School of T&E Management Program of Study

The School of T&E Management trains APM (T&E), Lead Test Engineers, and others assigned to PMAs/PEOs in the management of T&E programs. Includes the entire Defense Acquisition System operation.

Core Courses

AWT-100 Airworthiness for Testers – See previous description.

ITE-100 Indoctrination – See previous description.

FTB-100 Flight Test Basics – See previous description.

TP-100 Test Planning – See previous description.

TR-100 Test Reporting – See previous description.

TP-200 Test Planning for T&E Managers – See previous description.

TR-200 Test Reporting for T&E Managers – See previous description.

Specialty Courses

DAU-210 Test & Evaluation Across the Acquisition Lifecycle

Description: The overall objective of this course is to provide students with the knowledge and skills needed to effectively perform the role of Assistant Program Manager for Test and Evaluation (APMT&E) and Lead Test Engineer (LTE) for their perspective programs. The course will concentrate on the interaction between T&E, Systems Engineering and Acquisition in accordance with the DoD Integrated Defense Acquisition, Technology, and Logistics Life Cycle Management System; DODI 5000.2; NAVAIR Systems Engineering Technical Review (SETR) Process, NAVAIR INST 4355.19; and the NAVAIR Instruction 3960.2, and associated instructions.

Additional Course Information: 2 days.

DAU-211 Logistics Test & Evaluation

Description: The Logistics Test and Evaluation Course provides an overview of DOD Directorate 5000.01 and DOD Instruction 5000.02 as well as acquisition processes involved with systems engineering, test and evaluation, acquisition logistics (including reliability, maintainability, and availability), and contractor operations and test reporting.

Additional Course Information: 2 days.

EES-200 Effective Executive Speaking

Description: For managers to be able to assess speaking strengths and weaknesses; acquire skills to make an effective presentation; give a variety of presentations including: prepared manuscript, memorized, impromptu, and extemporaneous; organize a speech in a short period of time; answer questions from an audience; understand the "five-step sequence" when answering question from an audience; handle objections; internalizing the do's and don'ts in front of an audience; become skilled at convincing, informing, or entertaining an audience, including proper use of anecdotes, injecting humor/originality, using note cards, controlling nervousness, using a microphone, and maintaining continuity throughout the speech.

Additional Course Information: 3 days.

AWT-100 Airworthiness for Testers – See previous description.

GIT-210 Design of Experiments (Georgia Institute of Technology) – See previous description.

MTL-210 MATLAB Basics – See previous description.

OTF-200 Operational Test Fundamentals

Description: Operational Test Fundamentals prepares NAVAIR test professionals with a better understanding of operational test requirements, methods, and practices.

Additional Course Information: In development.

OTR-200 Certification of Readiness for Operational Test

Description: The class provides information about the Operational Test Readiness Review (OTRR) process, the preparation for and development of the OTRR brief, and the post OTRR follow-up requirements. After completing this course students should understand: The purpose of the OTRR, the governing DoD/SECNAV/NAVAIR policy for OTRRs, the SECNAV Certification Criteria/NAVAIR OTRR Process, how to prepare a Pre-OTRR/OTRR brief, and the post Pre-OTRR/OTRR actions required, and the NAVAIR Operational Assessment Maturity Review (OAMR).

Additional Course Information: 4 hours.

WBB-210 How Washington Works – See previous description.

College of Operational T&E Program of Study

The College of Operational T&E provides a framework and guidance for operational and integrated test techniques and procedures. Course curriculum addresses key operational test training requirements as well as integrated test concepts and procedures.

Core Courses

AWT-100 Airworthiness for Testers – See previous description.

ITE-100 Indoctrination – See previous description.

FTB-100 Flight Test Basics – See previous description.

TP-100 Test Planning – See previous description.

TR-100 Test Reporting – See previous description.

TP-200 Test Planning for T&E Managers – See previous description.

TR-200 Test Reporting for T&E Managers – See previous description.

OTF-200 Operational Test Fundamentals – See previous description.

COM-210 Operational Test Director

Description: The objective of the Operational Test Director (OTD) course is to provide OTD and support personnel with baseline knowledge of weapon system acquisition, and introduce them to policies, procedures, documentation, and reports required by DoD and SECNAV in conducting

Operational Test and Evaluation (OT&E). The course is targeted to the typical new OTD, reporting from the Fleet, who has little or no experience in acquisition or T&E.

Additional Course Information: 3.5 days. For registration and availability, please visit http://www.cotf.navy.mil/otd_course.htm. See the COMOPTEVFOR section in this guide.

COM-211 Integrated Evaluation Framework

Description: The Integrated Evaluation Framework course is a 2-day series of lessons and exercises which informs students of Commander, Operational Test & Evaluation Force (COMOPTEVFOR's) 11-step process for test planning.

Additional Course Information: 2 days. For registration and availability, please visit http://www.cotf.navy.mil/ot_framework.htm. See the COMOPTEVFOR section in this guide.

T&E Trade School Program of Study

The T&E Trade School trains craftsmen within the T&E workforce in technical and management subjects.

Core Courses

AWT-100 Airworthiness for Testers – See previous description.

ITE-100 Indoctrination – See previous description.

FTB-100 Flight Test Basics – See previous description.

TP-100 Test Planning – See previous description.

TR-100 Test Reporting – See previous description.

TP-200 Test Planning for T&E Managers – See previous description.

TR-200 Test Reporting for T&E Managers – See previous description.

Integrated Test Teams Focused Training

As part of NAVAIR's effort to train across the T&E community they offer specialty training in Test Planning and Test Reporting for Integrated Test Teams (ITTs). The series of TP-300, TR-300, TP-400, and TR-400 courses promotes team building and improved understanding of test requirements, test methods, and processes among the members of the ITTs, their senior managers, from NAVAIR and our industry partners.

TP-300 Test Planning for Integrated Test Teams (ITTS)

Description: Members of an Integrated Test Team (ITT) jointly receive familiarization to the test planning process and flight test discipline from the NAVAIR perspective, and openly discuss how it

directly relates to their ITTs structure and concept of operations. Students will review NAVAIR Instruction 3960.4 and the Test Planning Handbook, while also reviewing and discussing ITT specific relationships as defined in ITT Charters, Concept of Operations, and other program specific T&E documentation. It allows participants to review the same flight test planning techniques and processes that are presented to all NAVAIR FTEs in TP-100/TP-200 interlaced with ITT specific discussions, as well as an opportunity for ITT members to interact with NAVAIR Chief Test Engineers. The core material includes classroom instruction and ITT specific implementation discussions.

Additional Course Information: TBD per ITT requirements.

TR-300 Test Reporting for Integrated Test Teams (ITTs)

Description: Members of an Integrated Test Team (ITT) jointly receive a familiarization to the NAVAIR flight test re-reporting philosophy, as well as an introduction to the NAVAIR specific report types (e.g., daily flight re-ports, deficiency reports, report of test results (RTR), etc.). Students will review NAVAIR Instruction 3905.1 and the Test Reporting Handbook, while also reviewing and discussing ITT specific reporting requirements defined in ITT Charters, Concept of Operations, and other program specific T&E documentation. It allows participants to review the same flight test reporting techniques and processes that are presented to all NAVAIR FTEs in TR-100/TR-200 interlaced with ITT specific discussions, as well as an opportunity for ITT members to interact with NAVAIR Chief Test Engineers. The core material includes classroom instruction, report writing exercises, and ITT specific implementation discussions. Students develop the conceptual tools required to produce a NAVAIR test report.

Additional Course Information: TBD per ITT requirements.

TP-400 Test Planning for Integrated Test T&E Managers

Description: Managers of an Integrated Test Team (ITT) jointly receive a re-familiarization to the test planning process and flight test discipline from the NAVAIR perspective, and openly discuss how it directly relates to their ITTs structure and concept of operations. Students will review NAVAIR Instruction 3960.4 and the Test Planning Handbook, while also reviewing and discussing ITT specific relationships as defined in ITT Charters, Concept of Operations, and other program specific T&E documentation. It allows participants to review the same flight test planning techniques and processes that are presented to their ITT workforce in TP-300 which is interlaced with ITT specific discussions, as well as a unique manager's only discussion on how to review a Test Plan. The students will also be provided an opportunity to interact with NAVAIR Chief Test Engineers. The core material includes classroom instruction and ITT specific implementation discussions.

Additional Course Information: TBD per ITT requirements.

TR-400 Test Reporting for Integrated Test T&E Managers

Description: Managers of an Integrated Test Team (ITT) jointly receive a re-familiarization to the flight test reporting philosophy, as well as an introduction to the NAVAIR specific report types (e.g., daily flight reports, deficiency reports, report of test results (RTR), etc.). Students will review NAVAIR Instruction 3905.1 and the Test Reporting Handbook, while also reviewing and discussing ITT specific reporting requirements defined in ITT Charters, Concept of Operations, and other program specific T&E documentation. It allows ITT Managers to review the same flight test reporting techniques and processes that are presented to their ITT workforce in TR-300 which is interlaced with ITT specific discussions, as well as a unique manager's only discussion on how to review a Test Report. The students will also be provided an opportunity to interact with NAVAIR Chief Test Engineers. The core material includes classroom instruction, report reviewing exercises, and ITT specific implementation

discussions. Students develop the conceptual tools required to review and prepare a NAVAIR test report for final approval.

Additional Course Information: TBD per ITT requirements.



Space and Naval Warfare Systems Command (SPAWAR)

As the Navy's Information Dominance systems command, SPAWAR designs, develops and deploys advanced communications and information capabilities. With more than 8,900 active duty military and civil service professionals located around the world and close to the fleet, Team SPAWAR is at the forefront of research, engineering, acquisition and support services that provide vital decision superiority to our forces at the right time and for the right cost.

SPAWAR Test, Evaluation and Certification (TE&C) courses utilize Computer Based Training (CBT). For access go to the Naval Systems Engineer Resource Center (NSERC) website for SPAWAR at:

<https://nserc.navy.mil/spawar/Pages/home.aspx>. Navy access policy requires users to have a PKI certificate (i.e. CAC card) and first time users must register to use NSERC with the first login. Once registration is complete and NSERC SPAWAR webpage access obtained, TE&C CBT courses can be found using the following menu drop-down banners and folder links: HQ / 5.O Engineering / 5.9 Test Eval & Certification / 5.9 TE&C Training."

For registration and availability of T&E-related courses listed below, please contact Bob Kolacki at 619-602-5425, or at robert.kolacki@navy.mil.

TE&C Orientation

Description: The TE&C Competency Orientation course provide orientation training to TE&C Competency workforce, and explains being a member of the TE&C Competency. By completing this orientation, the trainee will be able to describe the TE&C Competency organization and the functions associated with each TE&C sub-competency, describe what it means to be a member of the TE&C competency, and describe the difference between having 5.9 as your primary competency and as your secondary competency.

Who Should Take This Training: All designated TE&C personnel (i.e., personnel with TE&C as a Primary or Secondary Competency). Other personnel performing TE&C functions but not yet designated.

Additional Course Information: Half day.

T&E Working Integrated Product Team (WIPT) Tutorial (N84)

Description: Navy online PowerPoint presentation to provide T&E WIPT guidelines, lessons learned, best practices and approaches to enhance success in support of T&E planning and execution efforts for an acquisition program. Tutorial provided by DON T&E (N84).

Who Should Take This Training: All personnel associated with and supporting a T&E WIPT.

Additional Course Information: 1 Continuous Learning point. To access the course, please visit the DON T&E Website under T&E Workforce Development at

https://nserc.navy.mil/asnrda/don_te/homepage.aspx; or DAU Acquisition Community Connection for Naval T&E at <https://acc.dau.mil/CommunityBrowser.aspx?id=376281&lang=en-US>.

Tech Review of TE&C Criteria

Description: Self-paced on-line training course for SPAWAR 5.9 TE&C competency members for technical review of TE&C criteria for TEAM SPAWAR's programs and projects. The course is designed as a series of PowerPoint lectures that have been uploaded into NSERC as part of CBT training. By completing this training, the trainee will be able to reinforce Technical Authority (TA) Bootcamp training/guidance, understand TA roles/responsibilities for performing reviews, and apply TA CONOPS/Execution Guide for conducting reviews.

Who Should Take This Training: This is a self-paced on-line training course for SPAWAR 5.9 TE&C competency members, who have been selected to participate in technical review of TE&C criteria for TEAM SPAWAR's programs and projects.

Additional Course Information: Course organized into 6 objectives with 22 lessons (2 hours per lesson to complete).

System Operational Verification and Test (SOVT) Preparation and Execution Guide (SPEG) Process

Description: Upon completion of this training, participants should understand how to build a SOVT using the SPEG Appendix A SOVT Template. By completing this training, the trainee will be able to emphasize details of the SOVT document format, understand the use of the SOVT Test Stage tables, how to complete the SOVT Document Approval Checklist.

Who Should Take This Training: SOVT developers, reviewers, and installers.

Additional Course Information: Delivered via PowerPoint brief.

Verification, Validation, and Accreditation (VV&A) of Labs

Description: This VV&A of SPAWAR Labs for Test Support course provides guidance for individuals who have a role in the VV&A process. By completing this training, trainees will be able to understand the steps required to complete the VV&A process, individual roles and responsibilities in the process, the tools available to help you carry out the process.

Who Should Take This Training: Anyone who has a role in the VV&A process.

Additional Course Information: Course delivered via PowerPoint presentation.

TE&C Academy Briefs

Description: These presentation briefs introduce TE&C members to various modules and concepts within TE&C, such as CDM, CDM Requirements, and NSPS. After completing this orientation, trainees will be able to describe how IDP objectives are addressed for TE&C competency personnel, describe the primary and alternate methods for meeting 5.9 CDM certification requirements, and describe the relationship between the 5.9 CDM and the NSPS performance appraisal system

Who Should Take This Training: TE&C members. Additional Course Information: Delivered via PowerPoint briefs.



Marine Corps System Command (MCSC)

Marine Corps Systems Command (MCSC) is the Commandant of the Marine Corps's agent for acquisition and sustainment of systems and equipment used to accomplish their warfighting mission. The command outfits United States Marines with literally everything they drive, shoot and wear. Their focus is the young Marine in harm's way, protecting him or her, and providing this warfighter the wherewithal to execute the mission. MCSC's team of professional civilian Marines and active duty Marines equips the warfighter to win. They listen, learn, research, develop, test, procure and sustain – whatever it takes to get Marines what they need, when they need it efficiently and for the best value possible.

For registration and availability of T&E-related courses listed below, unless specified otherwise, please contact Dave Havrin at dave.havrin@usmc.mil.

Integrated Test Course

Description: The purpose of this course is to employ best practices for integrated testing procedures. Throughout the course, students will learn why collaboration across the Triad is important to the Marine Corps, and how following an integrated, collaborate T&E process helps USMC. Trainees will learn how the T&E Working Integrated Project Team (WIPT) and the Capabilities Documentation Integrated Project Teams (IPT) improve inter-command communications. Additionally, trainees will be able to describe the process, roles, responsibilities, functions, and relationships of Triad commands involved in integrated T&E, and explain how T&E considerations affect capabilities development and material development.

Who Should Take This Training: T&E career field.

Additional Course Information: 1 days.

T&E Working Integrated Product Team (WIPT) Tutorial (N84)

Description: Navy online PowerPoint presentation to provide T&E WIPT guidelines, lessons learned, best practices and approaches to enhance success in support of T&E planning and execution efforts for an acquisition program. Tutorial provided by DON T&E (N84).

Who Should Take This Training: All personnel associated with and supporting a T&E WIPT.

Additional Course Information: 1 Continuous Learning point. To access the course, please visit the DON T&E Website under T&E Workforce Development at https://nserc.navy.mil/asnrda/don_te/homepage.aspx; or DAU Acquisition Community Connection for Naval T&E at <https://acc.dau.mil/CommunityBrowser.aspx?id=376281&lang=en-US>.



Commander Operational Test & Evaluation Force (COMOPTEVFOR)

The Navy's Operational Test and Evaluation Force provides an independent and objective evaluation of the operational effectiveness and suitability of naval aviation, surface, subsurface, expeditionary, C4I, cryptologic, and space systems in support of Department of Defense and Navy acquisition and fleet introduction decisions. COMOPTEVFOR requires that all testers (those who will be planning or conducting operational testing) complete at least the level-I DAU courses in the Test and Evaluation (T&E) Career Field.

OTD Introductory Training

Description: This course is an introduction to DOD Acquisition and Navy Operational Testing, designed for new operational test directors who have recently reported from the Fleet to COMOPTEVFOR. These new testers have typically never been involved in acquisition or any kind of T&E, so this is their first learning opportunity. COMOPTEVFOR welcomes students from other commands and organizations, space permitting. A typical class includes a wide variety of students: new Navy and USMC test directors, contractors who support COMOPTEVFOR, personnel from program management and Navy labs, and personnel from other DOD agencies. Some attend to begin learning their new job; others attend to better understand COMOPTEVFOR and its processes. The course length is 3 days for students from other agencies, and 3 1/2 days for COMOPTEVFOR OTDs. The course covers the following: Navy Acquisition process, JCIDS documents, Operational Effectiveness and Suitability, the COMOPTEVFOR Framework Document, the TEMP, basic information assurance testing, use of modeling and simulation in OT&E, COMOPTEVFOR policies, DOT&E oversight, Report-Writing, and how to obtain fleet resources and targets for testing. On the 4th day, COMOPTEVFOR OTDs receive additional instruction on Contract Support and Finance/Colors of Money.

Who Should Take This Training: New OTDs from COMOPTEVFOR, VX-1, VX-9, VMX-22, and HMX-1. Also, program management personnel, Navy lab personnel, and anyone needing to understand COMOPTEVFOR.

Additional Course Information: 23 contact hours for OTDs, 19 for other students. For registration and availability, please visit http://www.cotf.navy.mil/otd_register.htm.

Integration Evaluation Framework

Description: This fast-paced 2-day course steps the student through the 12 steps of COMOPTEVFOR's Mission-Based Test Design (MBTD) process, which is the foundation of all COMOPTEVFOR testing. The course is primarily intended to train COMOPTEVFOR testers and their support contractors, but others are welcome, space permitting. MBTD was first implemented at COMOPTEVFOR in 2005 and has become the only accepted approach to detailed planning for Integrated Testing (IT) and Operational Testing (OT) by COMOPTEVFOR. The product of MBTD is the Integrated Evaluation Framework document, which documents the results of the MBTD effort.

Who Should Take This Training: OTDs and OTCs from COMOPTEVFOR and its support squadrons, contractors who support COMOPTEVFOR, program management personnel who need to understand the MBTD process, and others who are interested.

Additional Course Information: 14 contact hours for all students. For registration and availability, please visit http://www.cotf.navy.mil/ot_framework.htm.

Pre-requisites: None, although prior experience in T&E is recommended.



Marine Corps Operational Test & Evaluation Activity (MCOTEA)

MCOTEA is the Marine Corps leader in all aspects of realistic operational test and evaluation of material system capabilities throughout a material system's life cycle. MCOTEA's highly trained, professional workforce is the voice for the Operating Force Marine, enabling informed decision making, and ensuring always that test reports accurately and objectively describe what is known and isn't known about the Operational Effectiveness and Suitability of the material solution being evaluated. MCOTEA provides the training for their operational test workforce as described below in addition to DAU courses.

For registration and availability of T&E-related courses listed below, unless specified otherwise, please contact Mark Flannery at mark.s.flannery@usmc.mil.

OTA Process

Description: To provide each participant with a basic understanding of the MCOTEA process through a thorough introduction to the MCOTEA OTA Manual.

Who Should Take This Training: Operational testers involved with Marine Corps systems and other interested personnel involved in T&E.

USMC T&E Guidebook

Description: To provide participants an introductory course on Marine Corps Test and Evaluation activities with a Program of Record and how HQ, CD&I, MCOTEA and MCSC interact with T&E.

Who Should Take This Training: Operational testers involved with Marine Corps systems and other interested personnel involved in T&E.

Test and Data Management

Description: To provide the Test Manager (TM) detailed knowledge of relationships, roles, and responsibilities in test planning, logistics and execution.

Who Should Take This Training: Operational testers involved with Marine Corps systems and other interested personnel involved in T&E.

Test Team

Description: To provide introductory knowledge of the MCOTEA Test Team by describing the relationships, roles, and responsibilities of the test team members.

Who Should Take This Training: Operational testers involved with Marine Corps systems and other interested personnel involved in T&E.

Live Fire

Description: To provide test teams an introductory course on Live Fire Test and Evaluation activities with a Program of Record and how MCOTEA LFT&E teams interact with DT and OT.

Who Should Take This Training: Operational testers involved with Marine Corps systems and other interested personnel involved in T&E.

RAM Training (DOT&E)

Description: To provide detailed knowledge of RAM and reliability growth planning for a Program of Record.

Who Should Take This Training: Operational testers involved with Marine Corps systems and other interested personnel involved in T&E.

Information Assurance

Description: To provide test teams an introductory course on Information Assurance (IA) activities with a Program of Record and how MCOTEA IA teams interact with DT and OT.

Who Should Take This Training: Operational testers involved with Marine Corps systems and other interested personnel involved in T&E.

Operations Research

Description: To provide the Operations Analyst (OA) detailed knowledge of relationships, roles, and responsibilities in evaluation planning, data analysis, and evaluation reporting.

Who Should Take This Training: Operational testers involved with Marine Corps systems and other interested personnel involved in T&E.

INDUSTRY/ACADEMIA

In this section, training courses offered by institutions outside of the government are highlighted.

Georgia Institute of Technology

Design of Experiments

Description: Design of Experiments (DOE) allows calculation of the equations that relate output(s) and the variability of output(s) to the input variable levels. Learn the techniques for planning studies in which the inputs (factors) to a system/process can be varied and the outputs (responses) observed. Explore efficient planning and analysis methods for determining which inputs have statistically significant effects on outputs and output variability, including analysis of variance, full and fractional factorial experiments, randomization, and robust design. Learn how statistical power depends on confidence, sample size, and sensitivity. Gain hands-on experience using in-class labs, computer games, and simulations. Observe DOE solutions using various software packages, including DOE PRO, MINITAB, and MATLAB. Explore simulation techniques that accommodate inputs with varying probability distributions.

Who Should Take This Training: Engineers/Technicians, Managers.

Additional Course Information: 2 days, 2.1 CEUs. The course is offered throughout the year at various locations. For registration and availability, please contact Steve Gordon at 407-482-1423, or by email at steven.gordon@gti.gatech.edu.

Test & Evaluation Research and Education Center

Description: Georgia Tech's Test & Evaluation Research and Education Center (TEREC) serves as a focal point for solving the problems of the T&E community. Part of TERC's mission is to expand the knowledge of the T&E community through education and training programs. It was in this regard that TERC established a T&E certificate program by which persons could receive certification in T&E based on the completion of a series of short courses. TERC offers a range of T&E short courses, which may also be taken independently of the certificate program.

Who Should Take This Training: Individuals in the T&E Community.

Additional Course Information: The T&E Certificate is awarded based upon successfully completing two required courses and obtaining an additional 6 Continuing Education Units (CEU) from a group of applicable electives. The courses making up the T&E Certificate Program are offered to the public on an irregular basis throughout the year. The program can also be offered under contract at off-site locations, allowing customizations of courses to focus on the specific application of the customer. For registration and availability, please email Steve Gordon at steve.gordon@terec.gatech.edu.

International Test and Evaluation Association (ITEA)

Nuclear Weapon Effects (Acquisition and T&E Impacts)

Description: This tutorial reviews on-going DoD initiatives and policy changes regarding nuclear survivability of military systems and the potential impact on T&E. Recently, there has been a re-emphasis regarding nuclear matters by DoD. This tutorial is a top level review of nuclear weapons effects (NWE) and their impact on military systems; the potential impact of DoD instructions on acquisition, test, and sustainment of new and legacy systems; and understanding of NWE test methodologies, resources, and capabilities.

Who Should Take This Training: Managers.

Additional Course Information: 4 hour tutorial hosted at the Annual Symposium. For registration and availability, please contact Mr. Jay Weaver (Director of Professional Development) at jweaver@itea.org/703-631-6220 (ext 205). www.itea.org.

Model Based Systems for Engineering for Flight

Description: This tutorial will introduce a new systems engineering tool, Model-Based Systems Engineering (MBSE), for flight test. MBSE is used for development of new projects within DoD and commercial aerospace communities. The tutorial covers Enterprise Architectures and the application of the DoD Architecture Framework (DoDAF) in its latest form (DoDAF 2.0); plus, it introduces Systems Modeling Language for flight test applications. These methods better integrate the test enterprise into the acquisition and system engineering domains.

Who Should Take This Training: Engineers/Technicians, Managers.

Additional Course Information: 4 hour tutorial hosted at the Annual Symposium. For registration and availability, please contact Mr. Jay Weaver (Director of Professional Development) at jweaver@itea.org/703-631-6220 (ext 205). www.itea.org.

T&E of Cyber Systems

Description: This tutorial will explain the meanings of Cyber and will provide an overview of cyber warfare, cyber security, and cyber T&E. Topics covered include host security, botnets, network security, encryption, wireless security, penetration testing, systems engineering of cyber systems to be test ready, cyber systems T&E, and cyber warfare case studies. Participants should leave this tutorial with a basic understanding of cyber security and an appreciation of the complexity of cyber systems T&E.

Who Should Take This Training: Engineers/Technicians, Managers.

Additional Course Information: 4 hour tutorial hosted at the Annual Symposium. For registration and availability, please contact Mr. Jay Weaver (Director of Professional Development) at jweaver@itea.org/703-631-6220 (ext 205). www.itea.org.

Using TENA and JMETC for Integrated Test and Training

Description: The Test and Training Enabling Architecture (TENA) was developed to enable timely interoperability among ranges, facilities, and simulations in a cost-efficient manner, as well as foster reuse of range assets and future software systems. TENA has also been selected for use in Joint Mission Environment Test Capability (JMETC) events in its role of prototype demonstrations and distributed testing. JMETC provides connectivity to the Services' distributed test capabilities and simulations, as well as industry test resources.

Who Should Take This Training: Engineers/Technicians, Managers.

Additional Course Information: 4 hour tutorial hosted at the Annual Symposium. For registration and availability, please contact Mr. Jay Weaver (Director of Professional Development) at jweaver@itea.org/703-631-6220 (ext 205). www.itea.org.

Combinatorial Testing with Design of Experiments

Description: This five-day course will provide the practitioner with the ability to apply the best tools and methods from combinatorial testing and DOE. It will cover the key terminology of DOE and various options to testing, showing why DOE is the most effective and efficient testing approach. It will provide the practitioner with the ability and rationale to make good decisions when conducting both developmental and operational tests under a wide variety of circumstances. DOE will be shown to be the science of data collection as it applies to testing and that it must be in the toolkit of anyone who has something to do with a test and evaluation process—from planning to execution and evaluation.

Who Should Take This Training: T&E career field.

Additional Course Information: 5 days. For registration and availability, please contact Mr. Jay Weaver (Director of Professional Development) at jweaver@itea.org/703-631-6220 (ext 205). www.itea.org.

Systems Engineering, T&E, and Project Management: An Integrated Process

Description: This one-hour presentation will provide an overview of integrating the Systems Engineering (SE), Test and Evaluation (T&E), and Projects Management processes—which are often perceived as three discrete processes and three different communities, but nothing could be farther from the truth. Private industry has long understood the importance of T&E to inform the SE process, and the leadership of Defense Acquisition is pushing the infusion of SE into development, acquisition, and T&E. To gain a complete understanding, we recommend that one attend the two-day course that will not only help systems engineers, program managers, testers, and evaluators to understand one another, but will begin to educate this combined community on how these disciplines must integrate into a unified and rigorous technical and managerial process.

Who Should Take This Training: Engineers, Project Managers.

Additional Course Information: 1 hour webinar, 2 day course. For registration and availability, please contact Mr. Jay Weaver (Director of Professional Development) at jweaver@itea.org/703-631-6220 (ext 205). www.itea.org.

Information Assurance and Cyber Security

Description: This webinar will introduce the "Information Assurance and Cyber Security" course that states these two terms are related practices that share objectives, but which differ in methods. Both are necessary to developing, operating and managing systems and networks. They complement one another when organized and structured correctly, which requires planning and vision in an organization. The two-day course will help systems engineers, program managers, IA managers, network owners, and systems assurance planners to understand one another. It will also provide concrete steps, actions, methods and checklists for implementing auditable, manageable system security across the system life cycle.

Who Should Take This Training: Systems engineers, program managers, IA managers, network owners, and systems assurance planners.

Additional Course Information: 1 hour webinar, 2 day course. For registration and availability, please contact Mr. Jay Weaver (Director of Professional Development) at jweaver@itea.org/703-631-6220 (ext 205). www.itea.org.

Fundamentals of Agile: A Pragmatic Approach to Adopting Agile

Description: Organizations today are seeking ways to improve the efficiency of their software development efforts while still meeting quality objectives. Competitive pressures and customer demands continue to reduce software product release schedules, driving organizations to seek fresh new approaches to building software. Agile software development methods are often cited as a way to accelerate software delivery and get more done with less. However, blindly following the high level advice given in Agile books and presentations often not address the realities of making Agile work in the real world. This course teaches you to pragmatically apply Agile methods to your software development process and organization. You will learn how to plan, communicate, implement, and deploy software applications using Agile. This course includes a running case study that allows course participants to apply Agile planning and implementation techniques throughout the course. Small groups will be formed, and a product will be planned and implemented from scratch. Teams present their product to the class at the end of the course. Attendees will leave Fundamentals of Agile with an in-depth understanding of how to apply Agile to a variety of software development situations.

Who Should Take This Training: Those interested in Agile software development.

Additional Course Information: 2 days. For registration and availability, please contact Mr. Jay Weaver (Director of Professional Development) at jweaver@itea.org/703-631-6220 (ext 205). www.itea.org.

Fundamentals of the T&E Process

Description: This three-day intensive course will describe the key principles of T&E as a critical part of systems engineering. The current world of T&E has evolved over the last 4 decades from a slogan mantra ("try before buy") to a set of widely accepted principles and integrated practices. Industry and government experience has produced processes that now enable T&E to be a dependable indicator of progress towards achieving system performance objectives during a development

program. The course will describe the procedures and tools that have emerged from U.S. military weapons acquisition programs and have been embraced by other government agencies. The instructors not only will focus on the application of this experience in the U.S. government programs, but also will describe how they are similarly applied in commercial programs and consumer product developments. Past course participants have included professionals from industry and from government, including the Departments of Defense, Energy, Homeland Security and Transportation.

Who Should Take This Training: Professionals from industry and from the government, including the Departments of Defense, Energy, Homeland Security and Transportation.

Additional Course Information: 3 days. For registration and availability, please contact Mr. Jay Weaver (Director of Professional Development) at jweaver@itea.org/703-631-6220 (ext 205). www.itea.org.

Air Force Institute of Technology (AFIT)

T&E Certification Program (TECP) and Degree Curriculum

Description: The AFIT TECP provides students a fundamental understanding in the basic concepts required for supporting analysis in the T&E Community. Particular emphasis is given to incorporating past, present, and future DoD T&E examples from all aspects of test (developmental, operational, etc) into the curriculum to tailor the applications of the methodology and approaches within each course. Current T&E focus in design of experiments (DOE) and reliability, maintainability, and availability (RM&A) analysis are addressed in required courses to complete the T&E Certificate Program.

Who Should Take This Training: The T&E Certificate Program is designed to support part-time and full-time students. All students are expected to participate in the TECP via distance learning, however, not all students will have the opportunity to enroll in classes each quarter. Therefore, part-time students may have a quarter with no classes scheduled and will take longer to complete the certificate program. Full-time students will take classes each quarter until completing the full certificate requirements. Initially, student enrollment is expected to be approximately 10-20 students per class. Course delivery is via asynchronous video with weekly synchronous classes to be held throughout the quarter.

Additional Course Information: For registration and availability, please contact Ms. Haley Perry, CTR, at (937) 255-3636 ext. 4383 (DSN 785).

National Defense Industrial Association (NDIA)

Building Survivable Systems: LFT&E

Description: This three-day intensive course will consist of a multi-faceted examination of the legislation, directives, requirements, preparation, and execution of Live Fire Testing, a statutory requirement for most major defense acquisition programs since 1987. The course will address the history of the LFT&E legislation, the Joint Live Fire Program, LFT&E candidacy, and preparation of Live Fire Test Plans and Detailed Test Plans within the context of the Test and Evaluation Master

Plans. The role of Modeling and Simulation in LFT&E will also be covered, including the role of pretest predictions and test assessment. In addition, LFT&E Congressional and DoD reporting requirements will be discussed as well as other related materials. The role of the LFT&E waiver from full-up system-level testing will also be addressed, including its purpose, how it is applied, and historical precedents.

Who Should Take This Training: The course is designed to inform military and civilian personnel involved in the defense acquisition process, Program Managers, and defense contractors involved in designing weapons and weapons platforms, about Live Fire Test & Evaluation requirements and conduct.

Additional Course Information: 3 days. For registration and availability, please visit http://www.survice.com/SINews/Live_Fire_Workshop.pdf.



Defense Information Systems Agency (DISA)

DISA is a DoD agency that provides command and control capabilities, engineering, test and evaluation, and enterprise infrastructure to continuously operate and assure a global net-centric enterprise in direct support to joint warfighters, National level leaders, and other mission and coalition partners across the full spectrum of operations.

Basic Information Technology T&E Methodologies Course

Description: The purpose of this newly developed DISA course is to fill the Information Technology T&E gap in DAU T&E courses. The intent is to increase the technical skills of the DISA T&E workforce and provide a certification to document these skills. Other agency or Service T&E members may attend this course as seats are available. For the course, DISA contracted with the University of Memphis to develop a curriculum designed to enhance the skills of the Information Systems T&E workforce. Course content addresses topics on: systems and requirements testing, networks testing, Agile T&E, risk-based testing, test coverage and techniques, defect management, security testing, interoperability, test automation tools and certification exam.

Who Should Take This Training: DISA T&E Workforce personnel, Service T&E members.

Additional Course Information: Course quotas are tightly managed to provide training to the DISA workforce as a priority. Contact the DISA T&E POC to determine if course spaces are available for non-DISA personnel needing training on Information Systems T&E. Courses are typically held at Fort Meade, MD and Fort Huachuca, AZ on a rotating basis. For registration and availability, please contact Mr. Jay Mallard, DISA T&E, at joseph.mallard@disa.mil.



Department of Navy Test & Evaluation (DON T&E) Office

The DON T&E Office, under the Deputy Assistant Secretary of the Navy for RDT&E (DASN(RDT&E)), has the mission to provide world class T&E tools, T&E policy, T&E best practices, adequately trained and sized T&E workforce, and an available and capable T&E Infrastructure to ensure Navy and Marine Corps acquisition programs can perform T&E efforts effectively and efficiently in support of the men and women warfighters of the Navy/Marine Corps team. Leadership and management of the DON Deputy for Test and Evaluation (T&E) for acquisition has a dual reporting relationship with the DON T&E Executive (N84).

T&E Working Integrated Product Team (WIPT) Tutorial (N84)

Description: Navy online PowerPoint presentation to provide T&E WIPT guidelines, lessons learned, best practices and approaches to enhance success in support of T&E planning and execution efforts for an acquisition program.

Who Should Take This Training: All personnel associated with and supporting a T&E WIPT.

Additional Course Information: 1 Continuous Learning point. To access the course, please visit the DON T&E Website under T&E Workforce Development at https://nserc.navy.mil/asnrda/don_te/homepage.aspx; or DAU Acquisition Community Connection for Naval T&E at <https://acc.dau.mil/CommunityBrowser.aspx?id=376281&lang=en-US>.

DON T&E Global Course, "Strategies for Effective and Efficient T&E"

Description: This course is structured to be a beyond-DAU course to provide development and training across DON for T&E Key Leadership Positions (KLPs)/Chief Developmental Testers (CDTs), Assistant Program Manager (APM) T&E and T&E Leads for Major Defense Acquisition Programs (MDAPs), and to baseline all workforce members with DON's approach to T&E concepts, principles, and best practices using a focus on TEMP development.

Who Should Take This Training: Personnel who are in a Program T&E KLP/CDT, APM (T&E) and T&E Lead position on acquisition programs; and other T&E workforce members as course openings allow.

Additional Course Information: 2 day course rotating to major SYSCOMs and select field activity locations. 16 Continuous Learning points. Course will be fielded at major SYSCOMs and select field activities on a rotating basis throughout the year. For registration and availability, please contact Mike Said, DASN(RDT&E), 571-256-7889, michael.o.said@navy.mil.

Pre-requisites: T&E Level 2 and 3 certified personnel (recommended).

Equivalents: None